

RESPONSIBLE LAND DISTURBER

THE FOLLOWING PERSON GARY FRANKS, PE (PRINT),

RESPONSIBLE LAND DISTURBER WHO WILL BE IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT THE LAND DISTURBING ACTIVITY. THIS PERSON MEETS THE APPLICABLE REQUIREMENTS OF VIRGINIA CODE SECTION 10.1-563 AND 10.1-566 BY VIRTUE OF THE FOLLOWING (CHECK THE CATEGORY THAT APPLIES):

_RESPONSIBLE LAND DISTURBER CERTIFICATE

_DCR CERTIFICATION FOR COMBINED ADMINISTRATOR, ADMINISTRATOR, PLAN REVIEWER, INSPECTOR, OR CONTRACTOR

__VA PROFESSIONAL ENGINEER, LAND SURVEYOR, LANDSCAPE

UPON AWARD OF THE CONTRACT AND BEFORE ANY LAND DISTURBING ACTIVITY CAN BEGIN, THE CONTRACTOR SHALL EXECUTE AND SUBMIT A RESPONSIBLE LAND DISTURBER NOTIFICATION FORM TO THE DEPARTMENT OF PLANNING, ENVIRONMENTA SERVICES, RM. 508, CITY HALL BUILDING, 810 UNION STREET, NORFOLK, VA 23510 TEL: (757) 664-4368. AWARD OF THE CONTRACT WILL RELIEVE THE ABOVE

PROJECT DESCRIPTION:

THE PROPOSED IMPROVEMENTS INCLUDE MILLING AND OVERLAYING THE ROADWAY AND RE-STRIP THE ROADWAY FROM A FOUR-LANE CORRIDOR TO A TWO-LANE WITH BIKE LANES. SIDEWALKS AND ADDITIONAL LANDSCAPE AREAS ARE INCLUDED AS PART OF THE STREETSCAPE IMPROVEMENTS.

ADJACENT PROPERTY OWNER NOTIFICATION:

DEVELOPMENT OR OFFSITE IMPROVEMENTS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

- 1. PROVIDE 30-DAY ADVANCED NOTICE TO PROPERTY OWNERS FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY WHEN PRIVATE IMPROVEMENTS ARE AFFECTED OR PAVEMENT WIDENING WILL OCCUR BETWEEN THE EXISTING PAVEMENT AND
- 2. PROVIDE 30-DAY ADVANCE NOTICE IF ANY CONSTRUCTION IS OCCURRING ON OFFSITE PRIVATE PROPERTY (INCLUDING
- WHEN PRIVATE IMPROVEMENTS ARE AFFECTED, THE NOTICE MUST INDICATE THE IMPACT ON THE PRIVATE IMPROVEMENTS. PRIVATE IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO, MAILBOXES, FENCES, ENTRANCES,
- 4. NO NOTICE IS REQUIRED FOR CONSTRUCTION THAT IS LIMITED TO THE DEVELOPMENT SITE AND RIGHT-OF-WAY WHERE PRIVATE IMPROVEMENTS ARE NOT AFFECTED.
- 5. IN LIEU OF A REQUIRED 30-DAY NOTICE, THE CITY WILL ACCEPT A SIGNED ACKNOWLEDGEMENT THAT THE PROPERTY OWNER IS SATISFIED THAT THEY HAVE BEEN PROVIDED AN EXPLANATION OF THE PROJECT SCOPE OF WORK.

CITY OF NORFOLK - TOLERANCE NOTES:

- 1. CONTRACTOR IS TO INSTALL ALL UTILITIES TO THE TOLERANCE REQUIRED BY THE CITY OF NORFOLK AND AS SHOWN ON THESE PLANS, SPECIFICALLY:
- 2. ALL STORM DRAINAGE SHALL BE INSTALLED TO WITHIN 0.10' (ONE TENTH OF A FOOT) OF THE ELEVATION SHOWN ON THE PLAN, OR AS SPECIFIED IN WRITING BY THE CITY.
- 3. MINIMUM STORM SEWER SLOPE SPECIFIED ON THE PLAN ARE ABSOLUTE MINIMUM; LESSER SLOPE WILL NOT BE ACCEPTED UNLESS IN WRITING BY THE CITY.
- 4. CONTRACTOR TO BE RESPONSIBLE FOR ALL CORRECTION COST (I.E. PLAN, REVISION, PHYSICAL CORRECTION, ETC.) REQUIRED AS A RESULT OF INSTALLATION NOT MEETING THE REQUIRED TOLERANCE.

CITY OF NORFOLK - E&S NOTES:

THE CONTRACTOR SHALL CONTACT THE CITY OF NORFOLK, BUREAU OF ENVIRONMENTAL SERVICES 664-4368 AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY SO THAT A LAND DISTURBING PERMIT CAN BE ISSUED AND A PRECONSTRUCTION CONFERENCE CAN BE SCHEDULED.

STORMWATER NOTES:

AS-BUILTS OF ANY IMPROVEMENTS RELATED TO STORM WATER AND STREETSCAPE ARE REQUIRED TO BE SUBMITTED TO THE DEPARTMENT OF PUBLIC WORKS — ENVIRONMENTAL STORMWATER FOR REVIEW AND APPROVAL PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. FAILURE TO PROVIDE THE NECESSARY AS-BUILT INFORMATION WILL RESULT IN DELAYS. AS-BUILTS ARE REQUIRED TO BE PERFORMED AND SEALED BY A LICENSED LAND SURVEYOR SHOWING THE AS-BUILT LOCATION AND ELEVATIONS COMPARED TO THE PROPOSED.

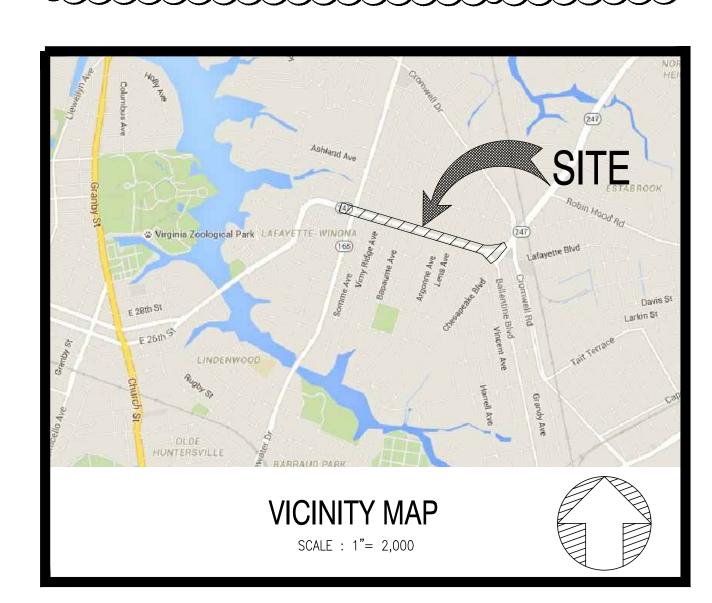
CONTRACTOR TO CONTACT ENVIRONMENTAL STORM WATER MANAGEMENT @ 823-4000 (48 HOURS NOTICE) FOR PRE-CONSTRUCTION CONFERENCE AND INSPECTION REQUIREMENT WHEN BMP IS PROPOSED.



LAFAYETTE BOULEVARD

STREETSCAPE IMPROVEMENTS Norfolk, VA

SITE PLAN #16-0025



PLANNI	NG DEPARTMENT APPROVAL BLOCK
	APPROVED BY THE CITY OF NORFOLK
 DATE	SIGNATURE

SHEET	DESCRIPTION
CV-1.0	COVER SHEET
CN-2.0	GENERAL NOTES
CX-3.0	EXISTING CONDITIONS AND EROSION/SEDIMENT CONTROL PLAN
CX-3.1	EXISTING CONDITIONS AND EROSION/SEDIMENT CONTROL PLAN
CX-3.2	EXISTING CONDITIONS AND EROSION/SEDIMENT CONTROL PLAN
CX-3.3	EXISTING CONDITIONS AND EROSION/SEDIMENT CONTROL PLAN
CX-3.4	EXISTING CONDITIONS AND EROSION/SEDIMENT CONTROL PLAN
CD-4.0	DEMOLITION PLAN
CD-4.1	DEMOLITION PLAN
CD-4.2	DEMOLITION PLAN
CD-4.3	DEMOLITION PLAN
CD-4.4	DEMOLITION PLAN
CL-5.0	LAYOUT PLAN
CL-5.1	LAYOUT PLAN
CL-5.2	LAYOUT PLAN
CL-5.3	LAYOUT PLAN
CL-5.4	LAYOUT PLAN
CP-6.0	PAVEMENT MARKING AND SIGNAGE PLAN
CP-6.1	PAVEMENT MARKING AND SIGNAGE PLAN
CP-6.2	PAVEMENT MARKING AND SIGNAGE PLAN
CP-6.3	PAVEMENT MARKING AND SIGNAGE PLAN
CP-6.4	PAVEMENT MARKING AND SIGNAGE PLAN
CG-7.0	GRADING PLAN
CG-7.1	GRADING PLAN
CG-7.2	GRADING PLAN
CG-7.3	GRADING PLAN
CG-7.4	GRADING PLAN
CT-8.0	MAINTENANCE OF TRAFFIC PLAN
CT-8.1	MAINTENANCE OF TRAFFIC PLAN
CT-8.2	MISCELLANEOUS NOTES AND DETAILS
CT-8.3	MISCELLANEOUS NOTES AND DETAILS
LP-9.0	LANDSCAPE PLAN
LP-9.1	LANDSCAPE PLAN
LP-9.2	LANDSCAPE PLAN
LP-9.3	LANDSCAPE PLAN 2

SITE INFORMATION

OWNER/DEVELOPER:

DESIGNER:

CITY OF NORFOLK DEPARTMENT OF PUBLIC WORKS NORFOLK, VIRGINIA 23510 CONTACT: TAMMY HALSTEAD

PH # 757-664-4632

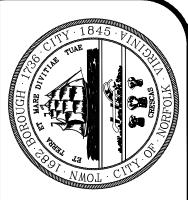
BLAKEWAY CORPORATION 770 INDEPENDENCE CIRCLE, SUITE 100 VIRGINIA BEACH, VIRGINIA 23455

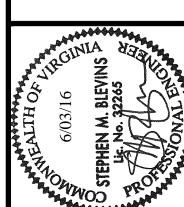
PH # 757-226-0081 FAX # 757-226-8765

LOCATION:

THE PROPERTY AFFECTED IS LOCATED ALONG LAFAYETTE BOULEVARD FROM TIDEWATER DRIVE TO CHESAPEAKE BOULEVARD WITHIN THE PUBLIC

RIGHT-OF-WAY
DISTURBED AREA: 66,079.85 SQ. FT. OR 1.51 ACRES ±





REV#	PROJECT REVISIONS	DATE
	REVISED PER CITY COMMENTS DATED 3/3/16	5/24/

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE **ISSUE DATE:** 2/22/16

CITY OF NORFOLK - RIGHT-OF-WAY NOTES:

- ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH THE CITY OF NORFOLK RIGHT-OF-WAY EXCAVATION AND RESTORATION MANUAL, (ORDINANCE NO.40,778), DEPARTMENT OF PUBLIC WORKS RIGHT-OF-WAY DIVISION. DOWNLOAD AT HTTP://WWW.NORFOLK.GOV/DOCUMENTCENTER/VIEW/779. IT IS IMPORTANT THAT CONTRACTORS FAMILIARIZE THEMSELVES WITH THE REQUIREMENTS OUTLINED IN THE MANUAL. FAILURE TO DO SO MAY IMPACT PROJECT COST. ALSO SEE "OTHER" IN THIS SECTION. EXCEPTIONS MAY BE PERMITTED. A REVIEW MEETING WITH RIGHT-OF-WAY IS REQUIRED. PLEASE CONTACT PUBLIC WORKS AT PWROW@NORFOLK.GOV TO SCHEDULE.
- 2. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL COMPLY WITH THE CITY OF NORFOLK DESIGN STANDARDS: DOWNLOAD AT HTTP://WWW.NORFOLK.GOV/INDEX.ASPX?NID=819. EXCEPTIONS MAY BE PERMITTED. A REVIEW MEETING WITH RIGHT-OF-WAY IS REQUIRED. PLEASE CONTACT PUBLIC WORKS AT PWROW@NORFOLK.GOV TO SCHEDULE.
- 3. FLOWABLE FILL IS NOT AN APPROVED MATERIAL FOR USE IN THE CITY OF NORFOLK FOR BACKFILL WITHOUT PRIOR APPROVAL. THE SELECT MATERIAL AND 21A STONE WILL BE IN ACCORDANCE WITH THE 2002 VDOT ROAD AND BRIDGE SPECIFICATIONS. FOR BACKFILL AROUND THE PIPE USE SELECT MATERIAL (SECTION 207) TYPE 1 AND 20 CBR COMPACTION. FOR SUB BASE MATERIAL USE 6" MIN. VDOT 21A STONE IN ACCORDANCE TO SECTION 208.
- 4. NEW DEVELOPMENTS, CONSTRUCTION AND ADDITIONS REQUIRE NEW SIDEWALK, CURB, GUTTER, AND DRIVEWAYS. EXCEPTIONS MAY BE PERMITTED.A REVIEW MEETING WITH RIGHT—OF—WAY IS REQUIRED. PLEASE CONTACT PUBLIC WORKS AT PWROW@NORFOLK.GOV TO SCHEDULE.
- 5. IF REQUIRED BY RIGHT-OF-WAY, WHEN THE CONTRACTORS WORK REQUIRES THE SAW CUTTING AND/OR PARTIAL DEMOLITION AND/OR REMOVAL OF ANY SECTION OF AN EXISTING APRON OR SIDEWALK, THE CONTRACTOR WILL BE REQUIRED TO REMOVE EXISTING APRON OR SIDEWALK AND REPLACE IT WITH A NEW MONOLITHIC APRON OR SIDEWALK. SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT. ALL CONCRETE IS TO BE SAW CUT. NO PATCHING WILL BE ALLOWED. COMMERCIAL APRONS SHALL BE REPLACED WITH AN APPROVED COMMERCIAL APRON. RESIDENTIAL APRONS SHALL BE REPLACED WITH AN APPROVED SIDEWALK DETAIL. CONTACT THE DIVISION OF RIGHT-OF-WAY PERMIT OFFICE FOR APPROVAL AT PWROW@NORFOLK.GOV (ORDINANCE NO: 40,778).
- 6. UTILITY POLES MUST BE RELOCATED AT YOUR PROJECT'S COST. A COPY OF THE WORK ORDER FOR POLE RELOCATIONS MUST ACCOMPANY RIGHT-OF-WAY PERMITS.

PERMITS

- 1. A PERMIT IS REQUIRED TO PERFORM EXCAVATION AND INSTALLATION WORK OF ANY KIND IN THE RIGHT-OF-WAY. APPLICATIONS: HTTP://WWW.NORFOLK.GOV/INDEX.ASPX?NID=362.
- 2. A PERMIT IS REQUIRED TO SLOW, CLOSE, REDIRECT, DETOUR, OR ALTER VEHICULAR AND PEDESTRIAN TRAFFIC FOR ANY DURATION. APPLICATIONS: HTTP://www.norfolk.gov/index.aspx?nid=362.
- 3. A PERMIT IS REQUIRED FOR LANE OR SIDEWALK CLOSURES FOR WORK WASHING, GRADING, OR INSTALLING ANY ITEM ABOVE OR UNDERGROUND. APPLICATIONS: HTTP://www.norfolk.gov/index.aspx?nid=362.
- 4. A PERMIT IS REQUIRED TO PLACE ANY OBJECT IN THE PUBLIC RIGHT-OF-WAY. APPLICATIONS: HTTP://WWW.NORFOLK.GOV/INDEX.ASPX?NID=362.
- 5. A PERMIT IS REQUIRED TO HAUL OVERSIZED, OVERWEIGHT, OR HEIGHT LOADS. APPLICATIONS: HTTP://WWW.NORFOLK.GOV/INDEX.ASPX?NID=362.

FEES

- 1. CITY CONTRACTORS: EXEMPT FROM PERMIT FEES THROUGH JULY 1, 2014. EFFECTIVE JULY 1, 2014 CITY CONTRACTORS MUST PAY FOR STREET, LANE, AND SIDEWALK CLOSURES
- 2. CURRENT RIGHT-OF-WAY PERMIT FEES: HTTP://WWW.NORFOLK.GOV/DOCUMENTCENTER/VIEW/789

TRAFFIC CONTROL

- 1. ALL TRAFFIC CONTROL SHALL COMPLY WITH THE CURRENT EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)", THE "VIRGINIA WORK AREA PROTECTION MANUAL", AND THE CITY OF NORFOLK RIGHT-OF-WAY EXCAVATION AND RESTORATION MANUAL. ADDITIONAL CHARGES APPLY IF OFF-DUTY OFFICERS ARE REQUIRED. A LIST OF PERMIT FEES IS LOCATED AT WWW.NORFOLK.GOV/INDEX.ASPX?NID=362.
- 2. FOR CONSTRUCTION IN OR ADJACENT TO ANY ARTERIAL AND /OR COLLECTOR STREETS REQUIRING TEMPORARY LANE OR STREET CLOSURE, THE CONTRACTOR MUST SCHEDULE A MEETING WITH THE CITY'S TRAFFIC MITIGATION TEAM. PLEASE CONTACT PUBLIC WORKS AT PWROW@NORFOLK.GOV TO SCHEDULE.
- THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DETAILED TRAFFIC CONTROL PLAN (MOT) WITH THE CONTRACTOR'S PERMIT APPLICATION TO WORK IN THE RIGHT—OF—WAY AT LEAST 14 DAYS IN ADVANCE OF THE START DATE. THE MOT SHALL BE A DRAWING OR AERIAL PHOTO WITH SITE SPECIFIC DETAILS. THESE SHALL INCLUDE BUT ARE NOT LIMITED TO: TRAFFIC SIGNS, DIRECTIONAL SIGNS, DESTINATION SIGNAGE, CHANNELIZING DEVICES, WATER—FILLED BARRIERS, PORTABLE MESSAGE BOARDS WITH MESSAGES TO BE DISPLAYED AND TIMES AND DURATIONS OF DISPLAYED MESSAGES. ADDITIONALLY THE MOT SHALL DISPLAY THE EXACT LOCATION OF ALL SIGNS AND/OR DEVICES INCLUDING SPACING FOR EACH SIGN AND/OR DEVICE, SPACING BEING APPROPRIATE FOR WORK ZONE LOCATION AND POSTED SPEED LIMITS. ALL MAINTENANCE OF TRAFFIC (MOT) PLANS SHALL CONFORM THE THE CURRENT ISSUE OF "THE VIRGINIA WORK AREA PROTECTION MANUAL". COPIES OR REPRODUCTIONS OF STANDARD VWAPM TTC PLANS MAY NOT BE SUFFICIENT. CONTRACTOR SHOULD CONSIDER THESE ITEMS WHEN BIDDING FOR CONSTRUCTION AS IT MAY AFFECT COST.
- 4. NORFOLK POLICE REQUIRES THAT OFF-DUTY OFFICERS FOR TRAFFIC CONTROL IN ANY SIGNALIZED INTERSECTION AND AS DIRECTED BY PERMIT BE SCHEDULED THROUGH THE SUPERVISOR OF THE TRAFFIC UNIT AT 757-823-4464.

BONDS

- 1. THE CONTRACTOR, OWNER, OR DEVELOPER WILL BE REQUIRED TO POST A CASH, CHECK, OR SURETY BOND OR LETTER OF CREDIT TO EXCAVATE IN THE RIGHT-OF-WAY. DOWNLOAD THE FORM: http://wwww.norfolk.gov/documentcenter/view/1406.
- 2. BOND AMOUNT SHOULD INCLUDE 100% TOTAL COST OF ROW INSTALLATION INCLUDING STREETLIGHTS, WATER, SEWER, STORM, BMP'S, ROADWAY, SIDEWALK, CURB, GUTTER.
- 3. BOND WILL BE REDUCED UP TO 10% FROM THE DATE OF FINAL INSPECTION FOR A 2-YEAR WARRANTY TERM. A SEPARATE WARRANTY BOND IS ACCEPTABLE IN LIEU OF A BOND REDUCTION. A LETTER REQUESTING RELEASE OR REDUCTION MUST BE SENT TO THE RIGHT-OF-WAY PERMITS OFFICE.
- 4. ALL CITY PROJECTS CAN NOT BE BID UNTIL UTILITIES ARE RELOCATED OR ARRANGEMENTS HAVE BEEN COORDINATED BY THE CITY'S PROJECT MANAGER, A/E. AND RIGHT-OF-WAY DIVISION. PLEASE PROVIDE A LIST AND DRAWINGS OF ALL UTILITIES NEEDING RELOCATION TO RIGHT-OF-WAY DIVISION AT OR BEFORE 30% SUBMITTAL.
- 5. PROJECT DESIGNERS MUST INCLUDE A DETAILED TRAFFIC CONTROL PLAN FOR UTILITY WORK WITHIN THE RIGHT—OF—WAY IN THE PLANS. FOR CONSTRUCTION IN OR ADJACENT TO ANY ARTERIAL AND/OR COLLECTOR STREETS AS DEFINED IN THE VIRGINIA WORK AREA PROTECTION MANUAL REQUIRING TEMPORARY LANE OR STREET CLOSURE, THE CONTRACTOR MUST SCHEDULE A MEETING WITH THE CITY'S TRAFFIC MITIGATION TEAM. PLEASE CONTACT PUBLIC WORKS AT PWROW@NORFOLK.GOV TO SCHEDULE.

OTHER:

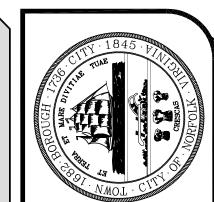
- 1. DETAILED STAMPED DRAWINGS FOR SHORING AND SCAFFOLDING WITH BE REQUIRED AS PART OF THE RIGHT-OF-WAY PERMIT PROCESS.
- 2. ANY EXCAVATION IN THE ROADWAY MUST BE PATCHED WITH ASPHALT. STONE IS NOT ACCEPTABLE.
- 3. FULL CURB TO CURB RESURFACING WILL BE REQUIRED IF ROADWAY PORTION IS CUT WITHIN THE FIRST 5 YEARS AFTER RESURFACING. AN ADMINISTRATIVE FEE OF \$500 WILL BE ASSESSED IN ACCORDANCE WITH CITY CODE.
- 4. WHEN A NEW APRON AND/OR SIDEWALK ARE INSTALLED, ALL NEW OR EXISTING UTILITY STRUCTURES SHALL BE INSTALLED AND/OR RELOCATED OUTSIDE THE AREA OF THE NEW APRON AND/OR SIDEWALK. A PERMIT AND INSPECTION ARE REQUIRED. PLEASE CONTACT THE RIGHT-OF-WAY PERMITS OFFICE AT 757-664-7306 OR AT WWW.NORFOLK.GOV/INDEX.ASPX?NID=362
- 5. AS PART OF THE CONTRACTOR'S PERMIT APPLICATION TO WORK IN THE RIGHT-OF-WAY, THE CONTRACTOR MUST SUBMIT A MAP IDENTIFYING THE PROJECTS STORAGE AND LAY DOWN AREAS WITHIN THE RIGHT-OF-WAY. CONTRACTORS ARE ENCOURAGED TO MAKE ARRANGEMENTS TO STORE MATERIALS AND LAY DOWN ON PRIVATE PROPERTY OR THEY MUST BE STORED WITHIN CONSTRUCTION SITE.
- 6. ALL MISS UTILITY MARKINGS IN THE RIGHT—OF—WAY ARE REQUIRED TO BE ERADICATED AT THE COMPLETION OF THE PROJECT IN ACCORDANCE WITH THE CITY'S ROW EXCAVATION & RESTORATION MANUAL LOCATED AT WWW.NORFOLK.GOV/INDEX.ASPX?NID=362.
- 7. DESIGNERS ARE RESPONSIBLE TO CHECK IN—FIELD GRADES AND TO CONSULT WITH THE PROPER CITY OF NORFOLK STAFF IF THERE ARE QUESTIONS OR CONCERNS. DESIGNERS MUST SUBMIT A NOTICE VIA EMAIL TO THE RIGHT—OF—WAY DIVISION AT PWROW@NORFOLK.GOV VERIFYING THAT GRADES HAVE BEEN CHECKED AND ARE CORRECT.

NOTIFICATIONS

- 1. NOTIFICATIONS MUST BE APPROACHED FROM 3 LEVELS OR TIERS FOCUSING ON THOSE AFFECTED BY THE CONSTRUCTION. CONTRACTORS AND/OR PROJECT SPONSOR WILL BE REQUIRED TO NOTIFY RESIDENTS AND BUSINESSES IN THE IMMEDIATE AREA THAT WILL BE AFFECTED BY THE CONSTRUCTION. DOOR HANGERS MUST BE PLACED AT LEAST 48 HOURS TO CONSTRUCTION AND MUST INCLUDE A 24 HOUR CONTACT PHONE NUMBER FOR EMERGENCIES. UPDATES MUST BE PROVIDED TO RESIDENTS AND BUSINESSES ON A BI-WEEKLY OR MONTHLY BASIS DEPENDING ON THE FOLLOWING:
- A) IMMEDIATE IMPACT BUSINESS OR RESIDENTS WITHIN THE CONSTRUCTION ZONE WHO WILL BE AFFECTED BY ACCESS RESTRICTIONS, NOISE, DIRT AND DUST, USE OF PROPERTY DIRECTLY ADJACENT TO THEM, ETC.
- B) AREA IMPACT THOSE WHO TRAVEL THROUGH OR WILL BE DETOURED AROUND LOCAL OR COLLECTOR STREETS, AFFECTED BY CONSTRUCTION INCLUDING CIVIC LEAGUES, BUSINESS ASSOCIATIONS AND PROPERTY OWNERS.
- C) CITYWIDE IMPACT THOSE WHO ARE AFFECTED BY VEHICULAR OR PEDESTRIAN ACCESS ON ARTERIAL STREETS OR IN BUSINESS OR OTHER PUBLIC ACTIVITY AREAS (SCHOOLS, UNIVERSITIES, GOVERNMENT FACILITIES, ETC.)

CITY OF NORFOLK - GENERAL NOTES:

- 1. ALL CONSTRUCTION METHODS AND MATERIALS IN THE PUBLIC RIGHT OF WAY SHALL CONFORM WITH THE CURRENT SPECIFICATIONS AND STANDARDS OF THE DEPARTMENTS OF PUBLIC WORKS, UTILITIES, CITY OF NORFOLK, VIRGINIA AND HAMPTON ROADS PLANNING DISTRICT COMMISSION LATEST 5th EDITION REGIONAL STANDARD SPECIFICATION AS AMENDED BY THE CITY OF NORFOLK DEPARTMENT OF UTILITIES STANDARD SPECIFICATION AND THE LATEST EDITION OF THE VIRGINIA DEPARTMENT OF HEALTH REGULATIONS.
- 2. PRIOR TO CONSTRUCTION OR EXCAVATION IN THE PUBLIC RIGHT OF WAY, THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF LOCATING ANY UNDERGROUND UTILITIES (PUBLIC AND PRIVATE) THAT MAY EXIST AND CROSS THROUGH THE AREA OF CONSTRUCTION THAT ARE NOT SHOWN ON THESE PLANS. BEFORE YOU DIG, TO MISS THE UTILITIES, CALL "MISS UTILITY OF VIRGINIA" AT 811. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AT THE EXPENSE ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
- 3. FOR WORK IN THE CITY OF NORFOLK'S RIGHT OF WAY, CONTACT 48 HOURS IN ADVANCE:
 DIVISION OF RIGHT OF WAY (PERMITS): 664-7306
 DRAINAGE: 823-4000
 UTILITIES: 664-6700
- 4. APPROVAL DOES NOT PRECLUDE THE NECESSITY OF THE EXCAVATOR, BY STATE LAW, TO CONTACT THE DIVISION OF TRANSPORTATION 48 HOURS BEFORE EXCAVATION AT 664-7306. (PERMIT NUMBER REQUIRED)
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WITH MATCHING MATERIALS ANY PAVEMENT, DRIVEWAYS, WALKS, CURBS, ETC. THAT MAY BE CUT, OR THAT ARE DAMAGED DURING CONSTRUCTION.
- 6. MANHOLE COVERS AND MISCELLANEOUS COVERS AND LIDS ARE TO BE RE-ESTABLISHED AT PROPOSED GRADES.
- 7. PROJECT LIMITS ARE THE PROPERTY LINES, UNLESS OTHERWISE NOTED.
- 8. TOPSOIL, SEED AND FERTILIZE ALL AREAS WITHIN THE PROJECT LIMITS NOT OCCUPIED BY STRUCTURES, PAVEMENT, SIDEWALKS, ETC. ALL LANDSCAPING SHALL BE PROVIDED AND INSTALLED BY THE OWNER. CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR PLACING TOPSOIL AND SEEDING TO NOT CONFLICT WITH PLANTING AREAS.
- 9. NO LANE CLOSURES AND/OR WORK IN THE RIGHT-OF-WAY, INCLUDING GRADING, SIDEWALK, CURB AND GUTTER, AND DRIVEWAY APRON INSTALLATION WILL BE ALLOWED WITHOUT A PERMIT FROM THE DIVISION OF RIGHT OF WAY (664-7306). ALL TRAFFIC CONTROL SHALL COMPLY WITH THE CURRENT EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)", THE "VIRGINIA WORK AREA PROTECTION MANUAL" AND THE CITY OF NORFOLK RIGHT OF WAY EXCAVATION AND RESTORATION MANUAL. ADDITIONAL CHARGES APPLY IF OFF-DUTY OFFICERS ARE REQUIRED. A LIST OF PERMIT FEES IS LOCATED AT WWW.NORFOLK.GOV/PUBLICMORKS/ROW.
- 10. DRIVEWAY APRON IS TO BE NORFOLK STANDARD HS-207 OR VDOT STANDARD CG-13, 8" FOR COMMERCIAL. ALL CONCRETE TO CLASS A-3 AIR ENTRAINED (3,000 PSI). MAINTAIN EXISTING ELEVATION AT STREET/EDGE OF SIDEWALK. REMOVE SIDEWALK AND FORM TO UNIFORM THICKNESS. REMOVE CURB TO BE INTEGRAL WITH APRON. ALL CONCRETE TO BE SAW CUT.
- 11. THE PROPOSED GROUND FLOOR ELEVATION OF ALL BUILDINGS SHALL BE 2 FOOT ABOVE THE BASE FLOOD ELEVATION AS SHOWN ON THE HUD FLOOD ZONE HAZARD MAPS FOR THE CITY OF NORFOLK, VIRGINIA.
- 12. ADEQUATE LIGHTING SHALL BE PROVIDED FOR EXTERIOR OF BUILDINGS AND/OR PARKING LOTS IN SUCH A MANNER AS TO ASSURE SAFETY AND SECURITY. LIGHTING SOURCES SHALL BE SHIELDED AND THERE SHALL BE NO SPILLOVER ONTO ADJACENT PROPERTIES OR RIGHT OF WAY.
- 13. CONTRACTOR TO SUBMIT AS—BUILT PLANS TO THE DRAINAGE ENGINEER, DEPARTMENT OF PUBLIC WORKS WITHIN TEN DAYS OF PROJECT COMPLETION. (WHEN STORM SEWER IS CONSTRUCTED).
- 14. REMOVAL OR RELOCATION OF ALL UTILITIES AND APPURTENANCES WILL BE AT THE RISK AND EXPENSE OF THE CONTRACTOR, THESE INCLUDE, BUT ARE NOT LIMITED TO VIRGINIA POWER, SEWER, WATER, TELEPHONE, COMMUNICATIONS, CABLE, FIBER OPTICS, ETC.
- 15. LOCATION AND DEPTH OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR WITH A CITY OF NORFOLK UTILITIES INSPECTOR PRESENT. CONTACT THE UTILITIES FIELD ENGINEERING OFFICE, 823-1001, AT LEAST 72 HOURS PRIOR TO EXCAVATION TO ARRANGE FOR AN INSPECTION.
- 16. THE CONTRACTOR SHALL CONTACT THE CITY OF NORFOLK, BUREAU OF ENVIRONMENTAL SERVICES 664—4368 AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY SO THAT A PRECONSTRUCTION CONFERENCE CAN BE SCHEDULED.
- 17. AS-BUILTS OF ANY IMPROVEMENTS RELATED TO STORMWATER AND STREETSCAPE IS REQUIRED TO BE SUBMITTED TO PUBLIC WORKS ENVIRONMWENTAL STORMWATER FOR REVIEW AND APPROVAL PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. FAILURE TO PROVIDE THE NECESSARY AS-BUILT INFORMATION WILL RESULT IN DELAYS. AS-BUILTS ARE REQUIRED TO BE PERFORMED AND SEALED BY A LISCENSEED SURVEYOR SHOWING THE AS-BUILT LOCATION AND ELEVATIONS COMPARED TO THE PROPOSED.





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770 INDEPENDENCE CIR - VA BE P757.226.0081 - F757 www.blakewaycor

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ENERAL NOTES

REV # PROJECT REVISIONS DATE

REVISED PER CITY COMMENTS DATED 3/3/16 5/24/1

STADA: 3

TOTAL: 1

SHEET CN-2.0

PREPARED BY: E. TOLLI

2/22/16

SURVEY LEGEND:

SYMBOL	ABBREV.	DESCRIPTION	SYMBOL	ABBREV.	DESCRIPTION
	AC.	ACRES	\times	MW	MONITORING WELL
	AATUR	ABANDONED ACCORDING TO UTILITY RECORDS		N/F	NOW OR FORMERLY
	BIT.	BITUMINOUS		(OA)	OVERALL
•		BOLLARD	☑ ⊗	PED.	PEDESTAL
		BORING	Е		PLUG/STUB
~~~~		BRUSH OR DRIPLINE		P.O.B.	POINT OF BEGINNING
	SBL	BUILDING SETBACK LINE		P.C.	POINT OF CURVE
	CATV	CABLE TELEVISION		PVC	POLYVINYL CHLORIDE
	CI	CAST IRON		RR	RAILROAD
	E	CENTERLINE		RCP	REINFORCED CONCRETE PIPE
	CLD	CENTERLINE OF DITCH		R/W, ROW	RIGHT-OF-WAY
—они—	OHW	CENTERLINE OVERHEAD WIRES	ß	<i>RDCO</i>	ROOF DRAIN CLEANOUT
	C&G	CONCRETE CURB & GUTTER	<b>⊗</b>	SFMV	SANITARY FORCE MAIN VALVE
	CMP	CORRUGATED METAL PIPE	— -SFM- —		SANITARY FORCEMAIN
	СВ	CURB BASIN	ss		SANITARY SEWER LINE
	DATUR	DEPICTED ACCORDING TO UTILITY RECORDS	ß	SSC0	SANITARY SEWER CLEANOUT
	DI	DROP INLET	S	SSMH	SANITARY SEWER MANHOLE
		EASEMENT LINE		<i>(S)</i>	SET MONUMENT
	EP	EDGE OF PAVEMENT	-		SIGN
	EW	EDGE OF WATER	<b>13.81</b>		SPOT ELEVATION
	ELEC.	ELECTRIC	-	S.F.	SQUARE FEET
(E)	EMH	ELECTRIC MANHOLE		S.H.P.B.	STATE HIGHWAY PLAT BOOK
	ELEV, EL	ELEVATION	0	SDMH	STORM DRAIN MANHOLE
0		EMERGENCY PUMP CONNECTION	<i>SD</i>	SD	STORM DRAIN PIPE
5	<b>EOI</b>	END OF INFORMATION		STRUC.	STRUCTURE
lack		EXCEPTION ITEM DESIGNATOR	Δ		SURVEY CONTROL
—x—		FENCE	0 🗅	MON.	SURVEY MONUMENT
	FF	FINISHED FLOOR ELEVATION		TELE.	TELEPHONE
Ф	FH	FIRE HYDRANT	<b>①</b>	TMH	TELEPHONE MANHOLE
ф	FP	FLAG POLE		TBM	TEMPORARY BENCHMARK
4	FES	FLARED END SECTION			TOE OF SLOPE/BANK
	FIRM	FLOOD INSURANCE RATE MAP			TOP OF SLOPE/BANK
	FL	FLOW LINE		TC	TOP OF CURB
	(F)	FOUND MONUMENT		RIM	TOP OF STRUCTURE ELEVATION
⊠•,	GM	GAS METER		TRAF.	TRAFFIC
H	GV	GAS VALVE	Þ	<i>TSP</i>	TRAFFIC SIGNAL POLE

	GPIN	GEOGRAPHIC PARCEL IDENTIFICATION NUMBER	$\boxtimes$	TRANS.	TRANSFORMER
—-с		GUY WIRE	0		TREE TRUNK
も	HC	HANDICAP	— -CATV- —	CATV	UNDERGROUND CABLE TELEVISION
	HVAC	HEATING VENTILATION & AIR CONDITIONING	<i>UE</i>	UE	UNDERGROUND ELECTRIC
	HDPE	HIGH DENSITY POLYETHYLENE	<i>G</i>	G	UNDERGROUND NATURAL GAS
	INSTR.	INSTRUMENT	- <i>-ut</i>	UT	UNDERGROUND TELEPHONE
	INV	INVERT ELEVATION	— <i>-UTC-</i> —	UTC	UNDERGROUND TRAFFIC CONTROL
$\blacksquare$	JBOX	JUNCTION BOX	ø	UP	UTILITY POLE
		LANDSCAPED AREA	ø <del>-</del> ₩		UTILITY POLE W/LAMP
*	<i>LP</i>	LIGHT POLE	M	W	WATER VALVE
		LOT LINE	10		VAULT
	MB	MAIL BOX	W	W	WATER LINE
0	MH	MANHOLE	0	WM	WATER METER
علاد		MARSH	P	WF	WETLANDS FLAG

S-2. ELEVATIONS SHOWN ARE EXPRESSED IN FEET AND BASED ON WHICH REFERS TO NAVD 88. CONTROL STATION UTILIZED: A3 ELEV=10.65.

S-3. THIS SURVEY/PLAT WAS PERFORMED/PREPARED WITHOUT THE BENEFIT OF A CURRENT AND COMPLETE TITLE REPORT AND MAY NOT SHOW ANY/ALL PARCEL LINES, EASEMENTS, RESTRICTIONS, ENCUMBRANCES, AND CURRENT RIGHTS-OF-WAY THAT MAY AFFECT THE SURVEYED AREA SHOWN.

S-4. THIS SURVEY/PLAT DOES NOT INTEND TO DEPICT ANY WETLANDS, HAZARDOUS WASTE, AND OTHER ENVIRONMENTAL CONDITIONS UNLESS OTHERWISE NOTED AND/OR SHOWN.

S-5. THE UNDERGROUND UTILITY INFORMATION IS DEPICTED BASED ON A COMBINATION OF EXISTING DESIGNATIONS/MARKINGS, FIELD LOCATED STRUCTURES, AND PLAN INFORMATION. THEREFORE, THE UTILITY INFORMATION SHOWN MAY NOT ACCURATELY REPRESENT THAT OF WHICH IS ACTUALLY IN PLACE IN THE FIELD. THIS SURVEY/PLAT MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITY INFORMATION SHOWN COMPRISES ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED.

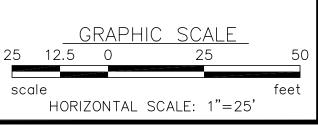
S-6. THE PROPERTY SHOWN APPEARS TO FALL WITHIN FLOOD ZONE(S) "X", ACCORDING TO F.E.M.A.'S FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR THE CITY OF NORFOLK, VIRGINIA. MAP NUMBER 5101040095F, MAP REVISED: SEPTEMBER 2, 2009. S-7. THIS TOPOGRAPHIC SURVEY OF A PORTION OF LAFAYETTE BLVD., NORFOLK, VIRGINIA WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF CHARLES L. SMITH, III, LS FROM AN ACTUAL X GROUND OR _ AIRBORNE SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON 05/08/15; AND THAT THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE

## EROSION CONTROL LEGEND:

IP INLET PROTECTION (STD. & SPEC. 3.07) TP) TREE PROTECTION (STD. & SPEC. 3.38)

TS) TEMPORARY SEEDING (STD. & SPEC. 3.31) PS PERMANENT SEEDING (STD. & SPEC. 3.32)

FOR CONSTRUCTION DETAILS AND SPECIFICATIONS REFER TO THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" THIRD EDITION, 1992.



面 IG CONDITIONS AND DIMENT CONTROL PL EXISTIN SION/SEI

> DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE

> > 2/22/16

SHEE

ISSUE DATE:

THE REPLACEMENT OF PORTIONS OF CURB/GUTTER AND SIDEWALK ALONG LAFAYETTE BOULEVARD WITHIN THE CITY RIGHT-OF-WAY.

EXISTING SITE CONDITIONS

THE SITE IS CURRENTLY DEVELOPED AND PUBLIC RIGHT-OF-WAY.

ADJACENT AREAS THE IMMEDIATE SURROUNDING AREAS CONSIST OF A MIXTURE OF COMMERCIAL AND

OFF-SITE AREAS ALL OFF-SITE WORK/RIGHT-OF-WAY IMPROVEMENTS WILL BE COMPLETED BY THE

CITY OR CONTRACTOR HIRED BY THE CITY.

THERE ARE NO CRITICAL AREAS WITHIN THE LIMITS OF DISTURBANCE.

THE SOIL IS CLASSIFIED AS TAN AND BROWN SILTY CLAY, MOIST (CL).

EROSION AND SEDIMENT CONTROL

RESIDENTIAL PROPERTIES.

THE EROSION AND SEDIMENT CONTROL MEASURES WILL CONSIST OF UTILIZING INLET PROTECTION ON EXISTING AND PROPOSED DRAINAGE STRUCTURES IMPACTED BY THIS LAND DISTURBANCE AS SHOWN ON THE SITE PLANS.

PERMANENT STABILIZATION

POST CONSTRUCTION STABILIZATION WILL CONSIST OF PERIMETER CURB TO DIRECT IMPERVIOUS SURFACE RUNOFF AND ALL DISTURBED GREEN AREAS SHALL BE GRASS SEEDED TO PREVENT SOIL EROSION.

STORMWATER RUNOFF CONSIDERATIONS

THE STORMWATER RUNOFF SHALL BE FLOW TO EXISTING DRAINAGE STRUCTURES WHICH WILL COLLECT RUNNOFF FROM THE PUBLIC RIGHT-OF-WAY. CONTRACTOR SHALL MAINTAIN AT ALL TIMES ALL EROSION AND SEDIMENT CONTROL MEASURES PER CITY OF NORFOLK COUNTY REQUIREMENTS SET FORTH IN THE EROSION AND SEDIMENT CONTROL NOTES LISTED ON THIS SHEET.

PROPOSED DRAINAGE CALCULATIONS ARE PROVIDED WITH THIS PROJECT. THIS DEVELOPMENT DOES NOT REQUIRE TEMPORARY OR PERMANENT SEDIMENT BASIN.

#### STRUCTURAL PRACTICES

SILT FENCE BARRIER - (STD & SPEC 3.05) SILT FENCE WAS SELECTED TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS IN ORDER TO PREVENT SEDIMENT FROM LEAVING THE SITE. SILT FENCE WILL BE INSTALLED DOWNSLOPE OF AREAS WITH MINIMAL GRADES AS INDICATED ON THE PLANS. SUPER SILT FENCE WILL BE BUILT USING WIRE REINFORCEMENT AS INDICATED IN CONSTRUCTION SPECIFICATION #5.

- RUNOFF. A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS INDICATED ON THE PLANS AND WILL BE THE ON PATH FOR CONSTRUCTION TRAFFIC ENTERING AND LEAVING
- 3. TREE PROTECTION (STD & SPEC 3.38) A FENCE BARRIER IS TO BE PLACED AROUND THE TREES AND VEGETATED AREAS WHICH WILL NOT BE DISTURBED TO PROTECT THE TREES AND OTHER VEGETATION FROM CONSTRUCTION EQUIPMENT AND SOIL COMPACTION. TREE PROTECTION IS TO BE PROVIDED AROUND THE TREES AS INDICATED ON PLANS. TREE PROTECTION SHOULD BE CHECKED DAILY AND REPAIRED IF NECESSARY.
- 4. TOPSOILING (STOCKPILE) (STD & SPEC 3.30) TOPSOIL WILL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED IN SUCH A MANNER THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO OFF-SITE SEDIMENT DAMAGE SHALL RESULT. SIDE SLOPES OF THE STOCKPILE SHALL NOT EXCEED 2:1. PERIMETER CONTROLS MUST BE PLACE AROUND THE STOCKPILE IMMEDIATELY; SEEDING OF STOCKPILES SHALL BE COMPLETED WITHIN 7 DAYS OF THE FORMATION OF THE STOCKPILE. TEMPORARY SEEDING IF IT IS TO REMAIN DORMANT FOR LONGER THAN 30 DAYS.
- 5. STORM DRAIN INLET PROTECTION (STD & SPEC 3.07) ALL STORM SEWER INLETS SHALL BE PROTECTED DURING CONSTRUCTION. SEDIMENT-LADEN WATER WILL BE FILTERED BEFORE ENTERING THE STORM SEWER INLET. INLET PROTECTION SHOULD BE USED ON EACH INLET SHOWN ON THE PLANS UNTIL UPLAND AREAS ARE STABILIZED.

**VEGETATIVE PRACTICES** 

- 1. TEMPORARY SEEDING (STD & SPEC 3.31.) TEMPORARY SEEDING SHALL BE USED TO REDUCE EROSION AND SEDIMENTATION BY STABILIZING DISTURBED AREAS THAT WILL TO BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAT 30 DAYS. TEMPORARY SEEDING WILL ALSO REDUCE DAMAGE FROM SEDIMENT AND RUNOFF TO DOWNSTREAM OR OFF-SITE AREAS, AND TO PROVIDE PROTECTION TO BARE SOIL EXPOSED DURING CONSTRUCTION UNTIL PERMANENT VEGETATIVE OR OTHER EROSION CONTROL MEASURES CAN BE ESTABLISHED. SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED. TEMPORARY SEEDING SCHEDULE IS SHOWN IN THE PLAN'S NOTES AND DETAIL SHEET.
- PERMANENT SEEDING (STD & SPEC 3.32) PERMANENT SEEDING IS THE ESTABLISHMENT OF PERENNIAL VEGETATIVE COVER ON DISTURBED AREAS BY PLANTING SEED. THE PURPOSE OF PERMANENT SEEDING IS TO REDUCE EROSION AND DECREASE SEDIMENT YIELD FROM DISTURBED AREAS. PERMANENTLY STABILIZED DISTURBED AREAS ARE ECONOMICAL, ADAPTABLE TO SITE CONDITIONS, ENHANCES NATURAL BEAUTY. RATE AND TIME OF APPLICATION WILL BE INDICATED IN THE SEEDING SCHEDULE LOCATED IN THE SITE PLAN.
- MULCHING (STD & SPEC 3.35) MULCHING IS THE APPLICATION OF PLANT RESIDUES OR OTHER SUITABLE MATERIALS TO THE SOIL SURFACE. THE PURPOSE OF MULCHING IS TO PREVENT EROSION BY PROTECTING THE SOIL SURFACE FROM RAINDROP IMPACT AND REDUCING THE VELOCITY OF OVERLAND FLOW AND TO FOSTER THE GROWTH OF VEGETATION BY INCREASING AVAILABLE MOISTURE AND PROVIDING INSULATION AGAINST EXTREME HEAT AND COLD. MULCHING SHOULD BE UTILIZED IN AREA WHICH HAVE BEEN PERMANENTLY SEEDED AND AREAS WHICH CANNOT BE SEEDED BECAUSE OF THE SEASON TO PROVIDE SOME PROTECTION TO THE SOIL SURFACE. MULCH MAY BE USED TOGETHER WITH PLANTINGS OF TREES, SHRUBS OR CERTAIN GROUND COVERS WHICH DO NOT PROVIDE ADEQUATE SOIL STABILIZATION BY THEMSELVES. MULCH SHALL BE USED IN CONJUNCTION WITH TEMPORARY SEEDING OPERATIONS AS SPECIFIED IN TEMPORARY SEEDING STD & SPEC 3.31. RATE AND TIME OF APPLICATION WILL BE INDICATED IN MULCHING SCHEDULE TABLE 3.35A LOCATED ON THE SITE PLAN.

- CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
- AND WILL BE SEEDED AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION. 5. TEMPORARY SEEDING OR OTHER STABILIZATION WILL FOLLOW IMMEDIATELY AFTER

4. SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING

- 6. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED.
- 7. THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
- 8. WITHIN 30 DAYS AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY E&S CONTROLS WILL BE CLEANED UP AND REMOVED.

TEMPORARY STABILIZATION TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE FINIAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS.

PERMANENT STABILIZATION

GRADING.

PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SHALL BE DONE WITH BERMUDA GRASS AT 40LBS (UNHULLED) OR 30 LBS. (MULLED) APPLICATION RATES SEEDING SCHEDULES SHALL BE IN ACCORDANCE WITH TABLE 3.32-E PERMANENT SEEDING SPECIFICATIONS FOR COASTAL PLAIN AREA (SEE TABLE THIS SHEET). SOIL TEST MAY BE PERFORMED BY THE COOPERATIVE EXTENSION SERVICE SOIL TESTING LABORATORY AT VPI & SU, OR BY A REPUTABLE COMMERCIAL LABORATORY. SEE EROSION & SEDIMENT CONTROL TECHNICAL BULLETIN #4, 2003 NUTRIENT MANAGEMENT FOR DEVELOPMENT SITES AT HTTP://WWW.DCR.STATE.VA.US/SW/E&S FOR ADDITIONAL SOIL TEST REQUIREMENTS.

REFER TO VE&SC STD AND SPEC 3.30, 3.35 & 3.36 FOR TOPSOIL AND SEEDBED PREPARATION AND SPECIFICATIONS AND APPLICATION RATES AND METHODS FOR ANCHORING MULCH.FERTILIZER AND LIME APPLICATIONS ARE TO BE IN ACCORDANCE WITH ESC TECHNICAL BULLETIN #4 (SEE EROSION & SEDIMENT CONTROL TECHNICAL BULLETIN #4. 2003 NUTRIENT MANAGEMENT FOR DEVELOPMENT SITES AT HTTP://WWW.DCR.STATE.VA.US/SW/E&S) ALSO, SEE TABLE 3.32-E PERMANENT SEEDING SPECIFICATION FOR COASTAL PLAIN AREA IN THIS SHEET FOR RATES.

STABILIZATION OF CUT AND FILL SLOPES

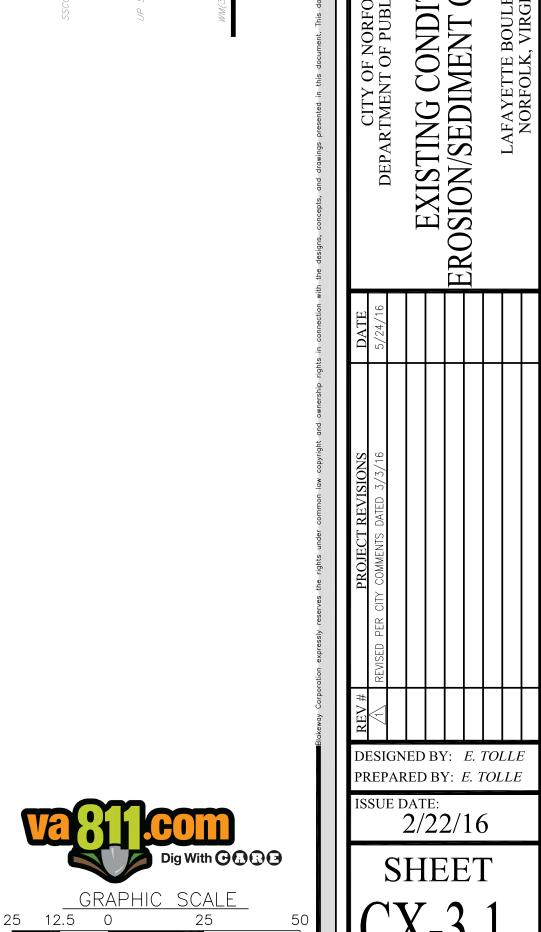
CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.

STORM WATER MANAGEMENT

SINCE THERE WILL BE NO INCREASE IN THE OVERALL IMPERVIOUS AREA, NO PERMANENT STORMWATER MANAGEMENT WILL BE REQUIRED FOR THE REDEVELOPMENT.

IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED DAIL' AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN

- 1. SILT FENCE SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL AND REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM END RUNS AND UNDERCUTTING. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY. THE FABRIC SHALL BE REPLACED PROMPTLY. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEN MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE REQUIRE SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE PREPARED AND SEEDED. THE SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED.
- 2. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR WASHING AND REWORKING OF EXISTING STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED OR TRACKED ONTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES.
- STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISH GRADING. SEEDING 3. THE TEMPORARY SEDIMENT TRAP SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED AND THE TRAP RESORTED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN VOLUME OF THE WET STORAGE. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. STRUCTURES SHALL BE REMOVED AND THE ARE STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
  - 4. THE DIVERSION DIKE SHALL BE INSPECTED AFTER EVERY STORM AND REPAIRS MADE TO THE DIKE, FLOW, CHANNEL, OUTLET OR SEDIMENT TRAPPING FACILITY AS NECESSARY. ONCE EVERY TWO WEEKS, WHETHER A STORM EVENT HAS OCCURRED OR NOT, THE MEASURE SHALL BE INSPECTED AND REPAIRS MADE IF NEEDED. DAMAGES CAUSED BY CONSTRUCTION TRAFFIC OR OTHER ACTIVITY MUST BE PREPARED BEFORE THE END OF EACH WORKING DAY.
  - THE STORM DRAIN INLET PROTECTION SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
  - THE CULVERT INLET PROTECTION SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. AGGREGATE SHALL BE REPLACED OR CLEANED WHEN INSPECTION REVEALS THAT CLOGGED VOIDS ARE CAUSING PONDING PROBLEMS WHICH INTERFERE WITH ON-SITE CONSTRUCTION. SEDIMENT SHALL BE REMOVED AND THE IMPOUNDMENT RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE AND CAUSE SEDIMENTATION PROBLEMS. TEMPORARY STRUCTURES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.



HORIZONTAL SCALE: 1"=25'

G CONDITIONS AND DIMENT CONTROL P.

#### SECUENCE OF CONSTRUCTION

- . CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES TO DEACTIVAT
- CITY.
- 3. PRIOR TO ANY DEMOLITION AND OR LAND DISTURBING ACTIVITIES, TREE PROTECTION FENCING, SILT FENCING, AND ALL ROOT PRUNING IS TO BE COMPLETE IF REQUIRED. ALL STORMWATER SYSTEM INCLUDING STRUCTURES, PIPING AND OUTFALL SHALL BE INSTALLED. THE STORM SYSTEM SHALL BE INSTALLED FROM THE DOWNSTREAM END AND EXTEND UPSTREAM.
- 4. DEMOLISH EXISTING ITEMS IN ACCORDANCE WITH THE DEMOLITION PLAN, FOLLOWING ANY SAFETY PRECAUTIONS PROVIDED BY THE UTILITY COMPANIES.
- 5. MILL EXISTING PAVEMENT, COMPLETE DEMOLITION OF PAVED AREAS AND CONCRETE CURBING AND DRIVEWAYS.
- 6. ROUGH GRADE PROJECT LIMITS WHERE INDICATED, INSTALL CONCRETE CURBING, AND DRIVEWAYS, INSTALL NEW PAVEMENT SECTION.
- 7. STABILIZE AND SEED DISTURBED AREAS AS SOON AS POSSIBLE.
- 8. AFTER AREA IS STABILIZED, REMOVE SEDIMENT FROM INLET PROTECTION DEVICES AND SEED DISTURBED AREAS.
- 9. CLEAN STORM DRAINAGE SYSTEMS OF ANY DEBRIS.
- 10. REMOVE REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES WITH 4. THE APPROVAL OF THE CITY.
- 11. ALL EROSION CONTROL DEVICES SHALL BE INSTALLED, MAINTAINED, AND REMOVED 5. IN ACCORDANCE WITH THE 1992 EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND SECTION 1.5 OF THE E&S REGULATIONS OF THE VIRGINIA DIVISION OF SOIL AND WATER CONSERVATION (VR 625-02-000).

EQUIPMENT OPERATION AND STORAGE: HEAVY EQUIPMENT, VEHICULAR TRAFFIC, OR STOCKPILES OF ANY CONSTRUCTION MATERIAL (INCLUDING TOPSOIL) SHALL NOT BE ALLOWED WITHIN THE DRIP LINES OF ANY TREE TO BE RETAINED. TREES BEING REMOVED SHALL NO FEELED, PUSHED OR PULLED INTO TREES BEING RETAINED.

A TREE PERMIT FROM PARKS AND URBAN FORESTRY WILL BE REQUIRED FOR ANY ROOT PRUNING, TREE TRIMMING, AND TREE REMOVAL OF CITY OF NORFOLK TREES.

CITY OF NORFOLK TREES MUST BE PROTECTED AND SHALL BE IN HEALTHY CONDITION AND UNDAMAGED OR TREES WILL NEED TO BE MITIGATED; AS DIRECTED BY THE CITY OF NORFOLK'S URBAN FORESTER.

ANY ROOT PRUNING, TREE TRIMMING, AND TREE REMOVAL MUST BE PERFORMED BY A CERTIFIED ARBORIST OF THE STATE OF VIRGINIA.

#### EROSION AND SEDIMENT CONTROL NOTES

MANAGEMENT STRATEGIES AND SEQUENCES OF EROSION CONTROL MEASURES

THE CONTRACTOR SHALL COMPLY IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE APPLICABLE REGULATIONS OF THE CITY OF NORFOLK "EROSION & SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS" AND THE LATEST EDITION OF THE STATE OF VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK BEFORE, DURING, AND AFTER CONSTRUCTION. THE FOLLOWING SEQUENCE OF EVENTS AND EROSION CONTROL MEASURES SHALL BE INCORPORATED INTO THE CONSTRUCTION SCHEDULE FOR THIS PROJECT AND SHALL APPLY TO ALL CONSTRUCTION ACTIVITIES WITHIN THE PROJECT LIMITS:

A) TEMPORARY CONSTRUCTION ENTRANCE(S) SHALL BE PROVIDED AT THE LOCATION(S) SHOWN ON THE PLANS. THIS ENTRANCE(S) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK (STD. & SPEC. 3.02). WASHRACKS ARE TO BE PROVIDED WHERE WATER IS AVAILABLE.

B) WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROAD BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS LARGER LAND DISTURBING ACTIVITIES.

- C) CONSTRUCTION TRAFFIC SHALL BE LIMITED TO ACCESS ROADS. ALL TRAFFIC IS PROHIBITED FROM CROSSING DRAINAGE SWALES AND STREAMS EXCEPT WHERE ABSOLUTELY NECESSARY (STD. & SPEC. 3.24 VE&SC HANDBOOK)
- 2. DEWATERING AND WELL POINT DISCHARGE OPERATIONS MUST PROVIDE APPROPRIATE EROSION CONTROL DEVICES AND PRACTICES AND BE APPROVED BY THE APPROPRIATE INSPECTIONS BUREAU PRIOR TO COMMENCEMENT OF DISCHARGE OPERATIONS. FAILURE TO COMPLY MAY RESULT IN A "STOP WORK ORDER" BEING ISSUED.
- 3. TEMPORARY SEDIMENT TRAPS, SEDIMENT BARRIERS, CONSTRUCTION ENTRANCE, AND EROSION CONTROL STONE ARE TO BE PLACED PRIOR TO CLEARING AND GRUBBING PRIOR TO THE FIRST PHASE OF CONSTRUCTION.
- ALL PERMANENT STORM WATER MANAGEMENT FACILITIES INCLUDING EROSION CONTROL ARE TO BE INSTALLED AND MADE OPERATIONAL AT THE
- . THE CONTRACTOR SHALL COMPLETE DRAINAGE FACILITIES WITHIN THIRTY (30) DAYS FOLLOWING COMPLETION OF ROUGH GRADING AT ANY POINT WITHIN THE PROJECT.
- 6. CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.

  7. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED BY FENCING, FLAGS, SIGNS, ETC.
- A) PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN THIRTY (30) DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE (1) YEAR.
  - B) DURING CONSTRUCTION OF PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
  - C) A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IN THE OPINION OF THE LOCAL PROGRAM ADMINISTRATOR OR HIS DESIGNATED AGENT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION. VEGETAL COVER SHALL BE ESTABLISHED AS FOLLOWS:

SEED PER VOLUME III OF THE PFM

START OF CLEARING OPERATIONS, INCLUDING APPROVED SEDIMENT BASINS.

MULCH 2000#/AC. OF TO

TOPSOIL 4"THICK, PER V.D.O.T. SPEC.602)CLASS B)
LIME 4000#/AC.
FERTILIZER 1000#/AC. OF 10-10-10

(HYDROSEEDING MAY BE USED IN PLACE OF MULCHING ON AREA OTHER THAN DITCH BANKS). STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIVERSIONS, AND DITCH OR WATERCOURSE BEDS AND BANKS IMMEDIATELY AFTER INSTALLATION (STD. & SPEC. 33.6 VE&SC HANDBOOK).

A) ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

B) BEFORE NEWLY CONSTRUCTED CONVEYANCE CHANNELS ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED

- TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.

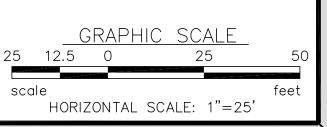
  A) CUT AND FILE SLOPES SHALL BE DEISIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE FROSION. SLOPES THAT ARE FOUN
- 10. A) CUT AND FILL SLOPES SHALL BE DEISIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE (1) YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
  - B) CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, OR SLOPE DRAIN STRUCTURE.
- 1. PERIODIC INSPECTIONS AND REQUIRED MAINTENANCE MUST BE PROVIDED, ESPECIALLY AFTER EACH SIGNIFICANT STORM. THE PROJECT SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION & SEDIMENT CONTROL PRACTICES.
- 2. THE CONTRACTOR SHALL MONITOR AND TAKE PRECAUTIONS TO CONTROL DUST, INCLUDING (BUT NOT LIMITED TO) USE OF WATER OR CHEMICAL DUST PALLIATIVE, LIMITING THE NUMBER OF VEHICLES ALLOWED ON—SITE, MINIMIZING THE OPERATING SPEED OF ALL VEHICLES, ETC.
- 13. RIPRAP SHALL BE PLACED AT THE NORMAL WATER ELEVATION OF THE PROPOSED WET POND TO PREVENT EROSION OR AS DIRECTED BY THE CIVIL INSPECTOR AS NECESSARY.
- 14. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE (1) WEEK PRIOR TO THE PRECONSTRUCTION CONFERENCE, ONE (1) WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE (1) WEEK PRIOR TO THE FINAL INSPECTION.

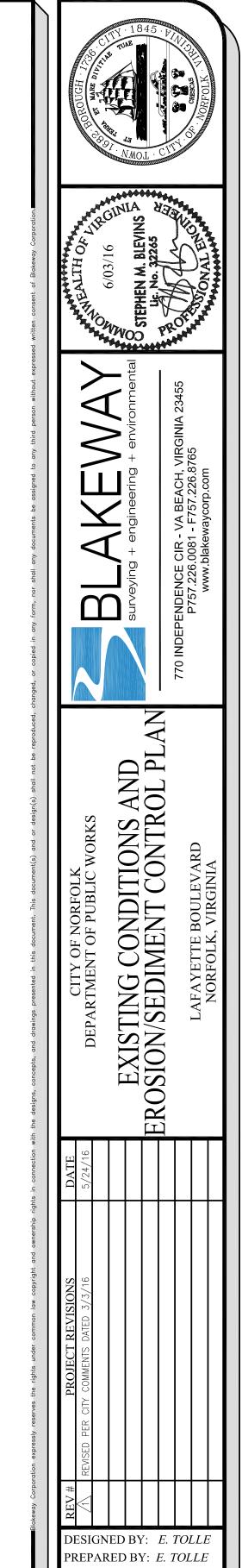
#### **ROOT PRUNING NOTES:**

(SEE SHEET CX-3.4 FOR ROOT PRUNING DETAILS)

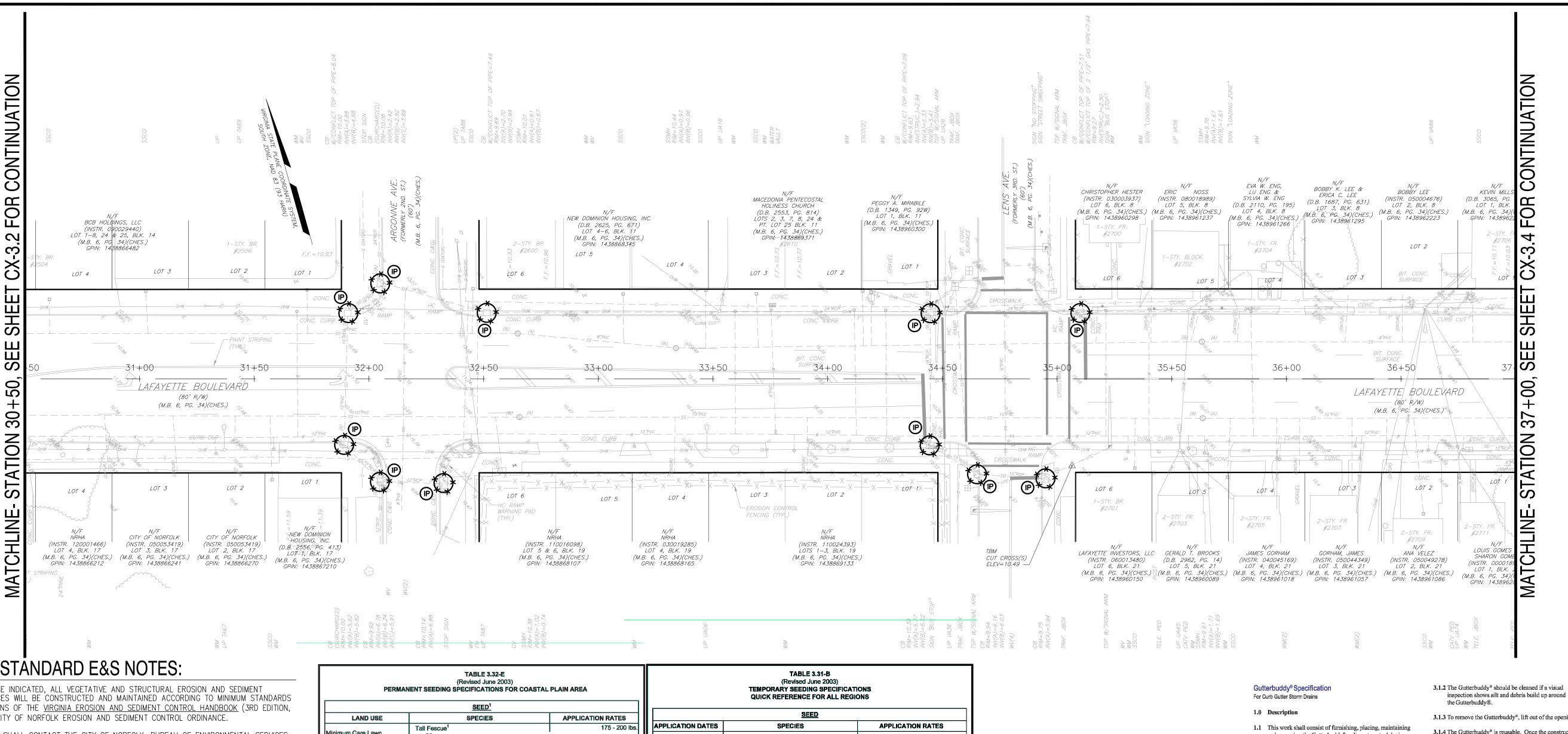
- 1. ROOT PRUNING SHALL BE DONE WITH A TRENCHER OR VIBRATORY FLOW TO A DEPTH OF 18". ROOTS OVER 1.5" IN DIAMETER SHALL HAVE A CLEAN CUT MADE BY A CLEAN SAW ON THE SURFACE OF THE ROOT WHICH IS STILL ATTACHED TO THE TREE. DO NOT PAINT THE CUT ROOT END. IF EXCAVATION IS FOR INSTALLATION OF UNDERGROUND UTILITIES. LEAVE THE ROOT INTACT AND THREAD THE LINES UNDERNEATH.
- . ROOT PRUNING SHALL TAKE PLACE PRIOR TO ANY CLEARING AND GRADING. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING.
- 3. ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVISION OF A CERTIFIED ARBORIST.
- 4. BACKFILL THE ROOT-PRUNING TRENCH WITH EXCAVATED SOIL AND MULCH AND MARK THE LOCATION FOR FUTURE REFERENCE. SILT FENCE MAY BE INSTALLED IN TRENCH PRIOR TO BACKFILLINGAS LONG AS THE TRENCH IS NOT OPEN FOR LONGER THAN 48 HOURS WITHOUT WATERING.
- 5. ROOT PRUNING WORK WILL NOT BE DONE WHEN MORE THAN THE TOP 1 INCH OF SOIL IS FROZEN. ROOT PRUNING WILL NOT BE UNDERTAKEN WHEN THE SOIL IS WET AND CONDITIONS ARE MUDDY.
- 6. THE CITY ARBORIST SHALL BE NOTIFIED WHEN ALL ROOT PRUNING AND TREE PROTECTION FENCE INSTALLATION IS COMPLETE.







2/22/16



# NORFOLK STANDARD E&S NOTES:

- CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (3RD EDITION, 1992) AND THE CITY OF NORFOLK EROSION AND SEDIMENT CONTROL ORDINANCE.
- THE CONTRACTOR SHALL CONTACT THE CITY OF NORFOLK, BUREAU OF ENVIRONMENTAL SERVICES (664-4368) AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY (INCLUDING DEMOLITION) SO THAT A PRECONSTRUCTION CONFERENCE CAN BE SCHEDULED.
- THE CONTRACTOR SHALL APPLY PERMANENT OR TEMPORARY SOIL STABILIZATION TO ALL DENUDED OR DISTURBED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MUST ALSO BE APPLIED TO DENUDED OR DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WHICH WILL REMAIN UNDISTURBED FOR LONGER THAN 14 DAYS. SOIL STABILIZATION MEASURES INCLUDE VEGETATIVE ESTABLISHMENT, MULCHING AND THE EARLY APPLICATION OF GRAVEL BASE MATERIAL ON AREAS TO BE PAVED.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION.
- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES AND CLEANUP OF SEDIMENTATION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE IMMEDIATELY.
- THE CONTRACTOR SHALL LIMIT SITE ACCESS BY CONSTRUCTION VEHICLES TO ENTRANCES PROTECTED BY A STONE CONSTRUCTION ENTRANCE (VESCH STD. & SPEC. 3.02) OR AN APPROVED COMPARABLE CONTROL MEASURE. SEDIMENT SHALL BE REMOVED FROM PAVED AREAS ON A DAILY
- STOCK PILES OF SOIL AND OTHER ERODIBLE MATERIALS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION FOR STOCKPILES ON SITE AS WELL AS FOR MATERIALS TRANSPORTED FROM THE PROJECT SITE.
- THE CONTRACTOR SHALL MONITOR AND TAKE PRECAUTIONS TO CONTROL DUST INCLUDING (BUT NOT LIMITED TO) USE OF WATER, MULCH, OR CHEMICAL DUST ADHESIVES AND CONTROL OF CONSTRUCTION SITE TRAFFIC.
- EFFLUENT FROM DE-WATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT ADJACENT PROPERTIES, WETLANDS, WATERWAYS OR THE STORM DRAINAGE
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ANY ADDITIONAL CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED NECESSARY BY THE PLAN APPROVING AUTHORITY.
- TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE NOT TO BE REMOVED UNTIL ALL DISTURBED AREAS ARE STABILIZED. AFTER STABILIZATION IS COMPLETE, ALL MEASURES SHALL BE REMOVED WITHIN 30 DAYS. TRAPPED SEDIMENT SHALL BE SPREAD AND SEEDED. CONTRACTOR SHALL HAND DIG AND FOLLOW ROOT PRUNING REQUIREMENTS WITHIN DRIP LINE OF EXISTING TREES. COORDINATE WITH CITY ARBORIST FOR MORE DETAILS.

PERMAN	(Revised June 2003) NENT SEEDING SPECIFICATIONS FOR COASTAL F	PLAIN AREA
	SEED1	
LAND USE	SPECIES	APPLICATION RATES
Minimum Care Lawn	Tall Fescue ¹ or	175 - 200 lbs.
(Commercial or Residential)	Bermudagrass ¹	75 lbs.
High-Maintenance Lawn	Tall Fescue ¹ or	200-250 lbs.
!	Bermudagrass ¹ (seed) <b>or</b>	40 lbs. (unhulled) 30 lbs. (hulled)
!	Bermudagrass ¹ (by other vegetative establishment method, see Std. & Spec. 3.34)	I
	Tall Fescue ¹	128 lbs.
General Slope (3:1 or less)	Red Top Grass or Creeping Red Fescue	2 lbs. 20 lbs.
'	Seasonal Nurse Crop ²	<u>20 lbs.</u> TOTAL: 150 lbs.
	Tall Fescue ¹	93-108 lbs.
!	Bermudagrass ¹	0-15 lbs.
Low-Maintenance Slope	Red Top Grass or Creeping Red Fescue	2 lbs.
(Steeper than 3:1)	Seasonal Nurse Crop ²	20 lbs.
1	Sericea Lespedeza ³	<u>20 lbs</u> TOTAL: 150 lbs
1 - When selecting varieties of	f turfgrass, use the Virginia Crop Improvement Associa	

turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4884 or at http://sudan.cses.vt.edu/html/Turf/turf/publications/publications2.html 2 - Use seasonal nurse crop in accordance with seeding dates as stated below:

February, March - April . Foxtail Millet May 1st - August . Annual Rye September, October - November 15th .....

November 16th - January .. Winter Rve 3 - May through October, use hulled seed. All other seeding periods, use unhulled seed. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30 -40 lbs/acre.

#### **FERTILIZER & LIME**

 Apply 10-20-10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,000 sq. ft.) Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

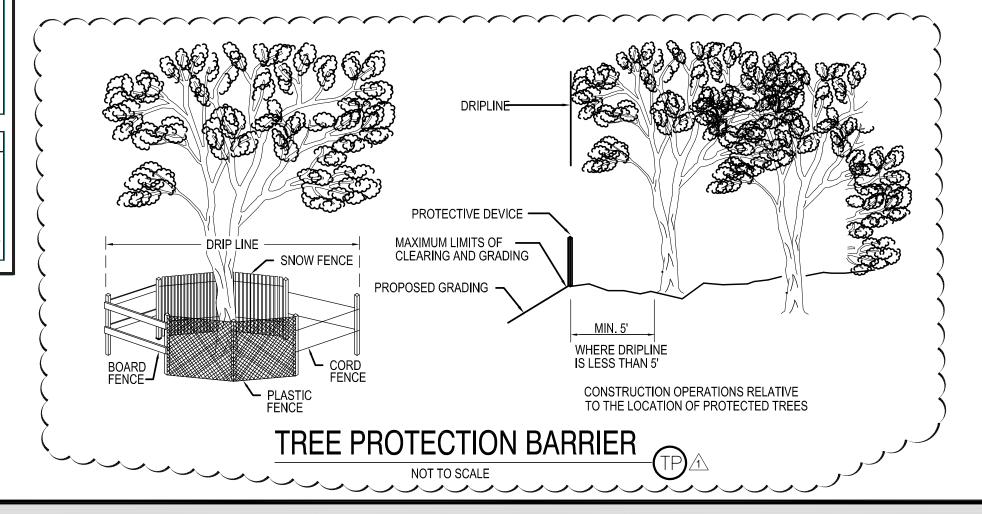
- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site. - Incorporate the lime and fertilizer into the top 4-6 inches of the soil by disking or by other means. - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

#### 50/50 Mix of Annual Ryegrass (Iolium multi-florum) & Cereal (Winter) Rye (Secale cereale 50 -100 (lbs/acre) Annual Ryegrass (Iolium multi-florum) 60 - 100 (lbs/acre) Feb. 16 - Apr. 30 May 1 - Aug. 31 German Millet 50 (lbs/acre) FERTILIZER & LIME Apply 10-10-10 fertilizer at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.) • Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

1 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site. Incorporate the lime and fertilizer into the top 4-6 inches of the soil by disking or by other means.

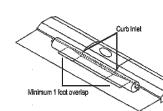
# 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

3 - When applying Slowly Available Nitrogen, use rates available in <u>Erosion & Sediment Control Technical Bulletin</u>



and removing the Gutterbuddy® sediment control device as directed by the engineer and as shown on the contract drawings. The Gutterbuddy® sediment control system distributed by:

2831 Cardwell Road Richmond, Virginia 23234 Phone: 800-448-3636 • Fax: 804-743-7779



2.0 Materials

2.1 GUTTERBUDDY®

The Gutterbuddy® shall be synthetic filter manufactured from recycled synthetic fibers.

2.1.1 The Gutterbuddy* will be manufactured to be 9" in diameter and are available in 4', 6', 8', 10', 12', 14' and 16' lengths and a minimum of twenty-four (24) inches longer than the curb inlet opening. This will allow for sufficient length to cover the inlet with twelve (12) inches beyond the inlet on both ends.

3.0 Construction Sequence

3.1 General

3.1.1 Install the Gutterbuddy® in front of the curb inlet opening. Each end of the Gutterbuddy® should overlap the curb inlet approximately 12".

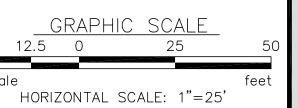
- 3.1.3 To remove the Gutterbuddy[®], lift out of the opening.
- 3.1.4 The Gutterbuddy® is reusable. Once the construc tion project is complete and it is no longer needed for sediment control, remove, clean and store out of the sunlight until needed on the next project.
- 3.1.5 Ponding is likely if sediment is not removed regularly. Inspection of Gutterbuddy® should be on a regular basis and immediately after major rain
- 4.0 Basis of Payment
- 4.1 The payment for any Gutterbuddy® used during the construction is to be included in the bid of the overall erosion and sediment control plan and priced

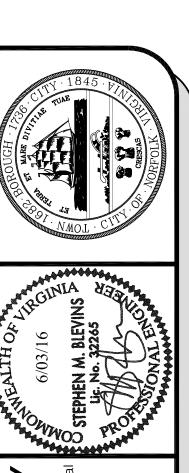




ACF / SI Combine Forces for Solution Implementation A Partnership for Water Quality					
ACF	Distributed by:	SI Geosolutions			
331 Cardwell Road ichmond, Virginia 23234 00) 448-3636 • FAX (804) 743-7779		4019 Industry Driv Chattancoga, TN 3741 (800) 621-0444 • FAX (423) 899-761			







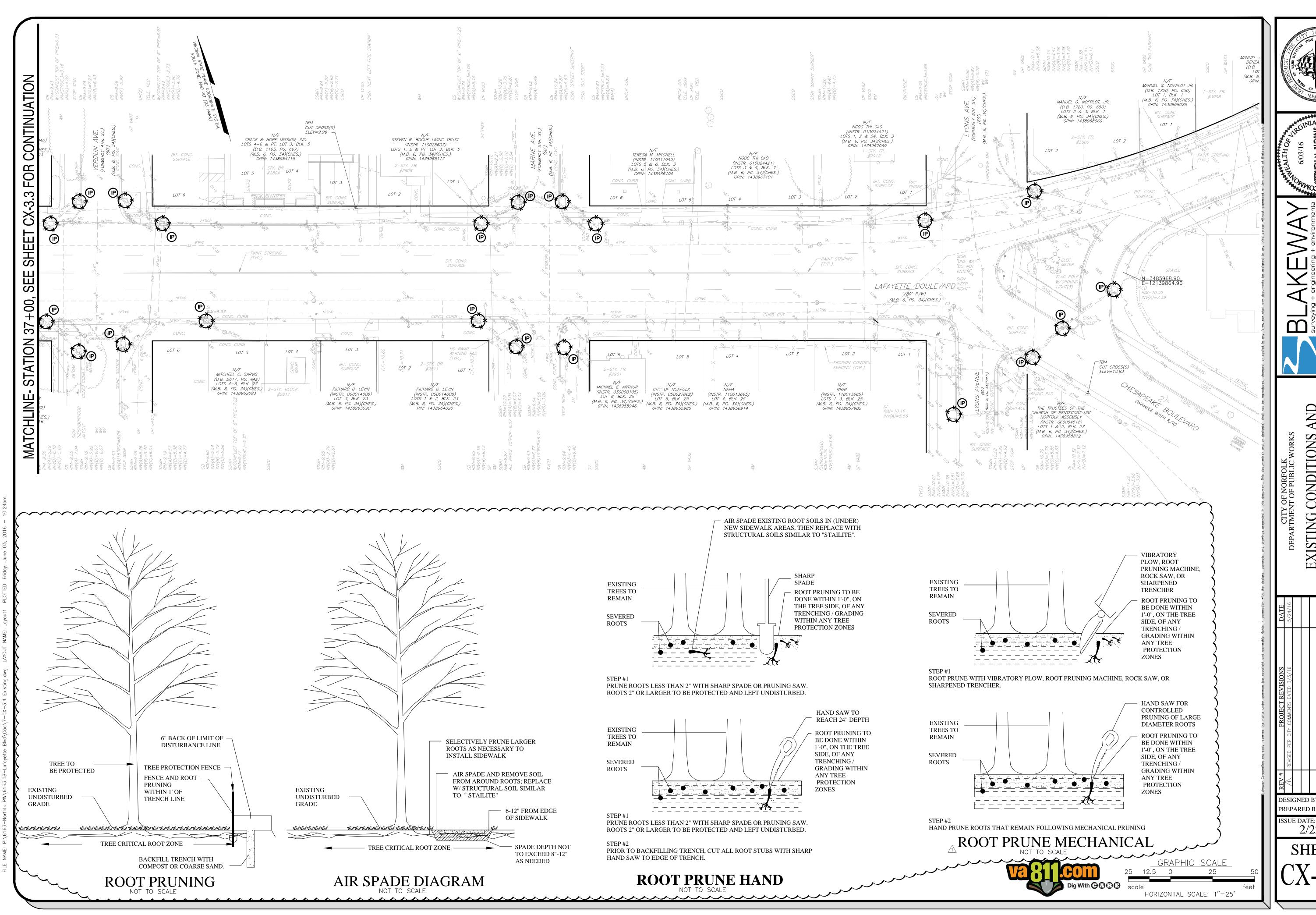
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IG CONDITIONS AND DIMENT CONTROL PI

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	PROJECT REVISIONS	REVISED PER CITY COMMENTS DATED 3/3/16				
	#					l

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE

2/22/16



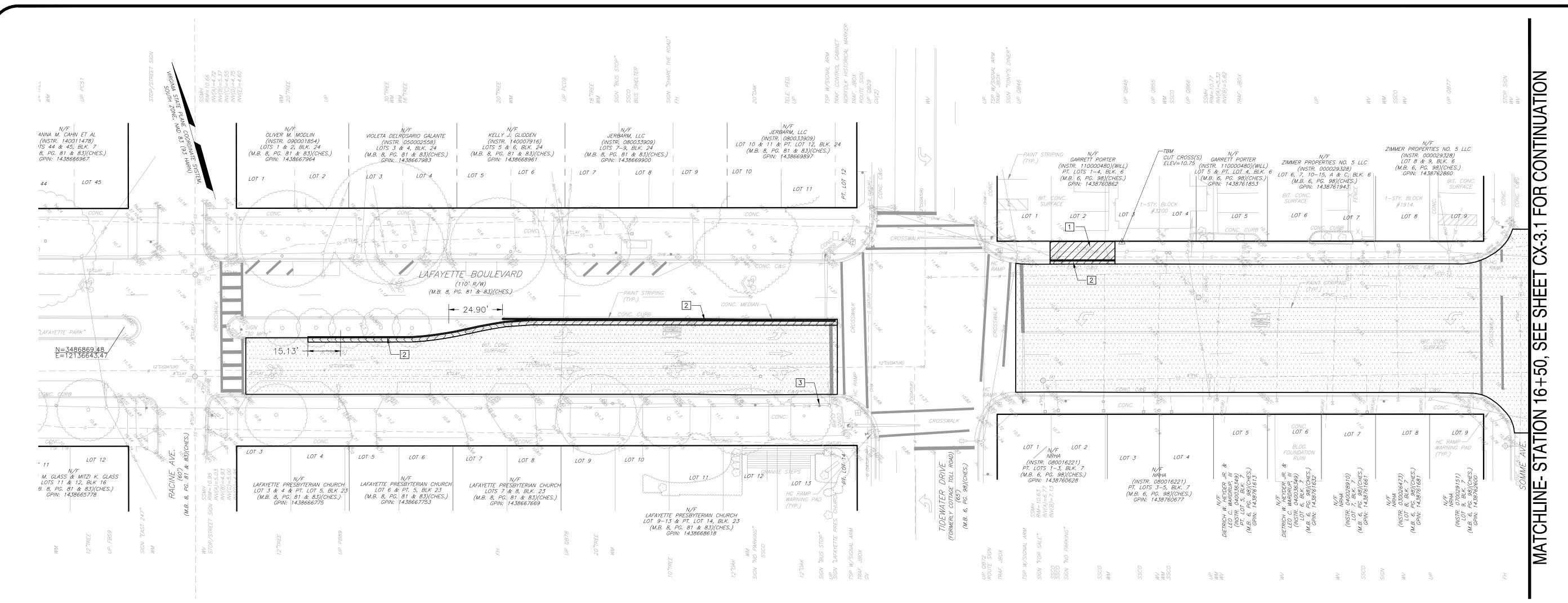


EXISTING CONDITIONS AND EROSION/SEDIMENT CONTROL PL

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLI

2/22/16

SHEE'



### **DEMOLITION LEGEND:**

- 2 SAWCUT AND REMOVE EXISTING CURB AND/OR GUTTER
- RELOCATE EXISTING SIGN. SEE PAVEMENT MARKING AND SIGNAGE PLANS FOR PROPOSED SIGN LOCATION.
- 4 REMOVE EXISTING TREES AND/OR VEGETATION
- ADJUST EXISTING STRUCTURE RIM, SEE GRADING PLANS FOR PROPOSED GRADE
- CONVERT EXISTING STRUCTURE TO MANHOLE
- ADJUST EXISTING UTILITY COVER TO MATCH PROPOSED GRADE. SEE GRADING PLANS FOR PROPOSED GRADE
- 8 RELOCATE EXISTING BANNER POLE. SEE SHEET CP-6.4 FOR
- PROPOSED LOCATION.
- 9 REMOVE EXISTING BANNER POLE LIGHT. EXISTING ELECTRICAL METER SHALL REMAIN FOR FEATURE PUBLIC ART PROJECT.
- 10 CONTRACTOR TO COORDINATE WITH DOMINION VIRGINIA POWER DURING ALL PHASES OF THIS PROJECT. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH DOMINION VIRGINIA POWER AND THE CITY OF NORFOLK TO DETERMINE ANY RELOCATION OF EXISTING UTILITY.
- 11 CONTRACTOR TO COORDINATE WITH CITY OF NORFOLK'S TRAFFIC ENGINEERING DEPARTMENT DURING ALL PHASES OF THIS PROJECT. CONTRACTOR TO USE CAUTION WHEN WORKING IN VICINITY OF UTILITY AND SHALL PROVIDE SUFFICIENT PROTECTION TO THE UTILITY DURING ANY NEARBY EXCAVATION.

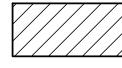
#### **DEMOLITION KEY:**



REMOVE EXISTING ASPHALT/CONCRETE PAVEMENT AND AGGREGATE BASE



MILL EXISTING ASPHALT AND/OR CONCRETE PAVEMENT TO PROVIDE A MINIMUM OF 2" PAVEMENT OVERLAY. SEE GRADING PLAN FOR PROPOSED GRADES.



REMOVE EXISTING CONCRETE SIDEWALK AND GRANITE OR CONCRETE CURB AND/OR GUTTER

### **DEMOLITION NOTES:**

PER SPECS.

- CONSTRUCTION SHALL BE COORDINATED SO THAT CUSTOMER ACCESS IS MAINTAINED TO EXISTING BUSINESSES AT ALL TIMES. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY TENANTS TO PROVIDE PLYWOOD RAMPS FOR ACCESS INTO EACH AFFECTED BUSINESSES.
- 3. INSTALL EROSION CONTROL MEASURES SHOWN AT THE INITIAL PHASE OF DEMOLITION. THESE EROSION CONTROL MEASURES SHALL REMAIN IN PLACE THROUGHOUT SITE CONSTRUCTION AND UNTIL FINAL SITE STABILIZATION AND DENUDED AREAS ARE ESTABLISHED.
- 4. WHEREVER DEMOLITION WORK IS BEING PERFORMED, THE CONTRACTOR SHALL MEET ALL CODES AND REQUIREMENTS FOR PROVIDING WARNINGS AND BARRIERS TO PROTECT THE PERSONNEL. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID UNNECESSARY DAMAGE TO EXISTING SURFACES.
- 5. ALL EXISTING ITEMS TO REMAIN WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO LIKE OR BETTER CONDITION AT THE EXPENSE OF THE CONTRACTOR.
- 6. CURBS AND PAVEMENT TO BE DEMOLISHED SHALL BE SAW CUT ALONG PERPENDICULAR OR RADIAL TO THE EDGES OF CONCRETE OR PAVEMENT.
- 7. THE CONTRACTOR SHALL COORDINATE DIRECTLY WITH DOMINION POWER (CHERYL HUNT, 393-3808 CELL 434-1753) FOR THE REMOVAL OR RELOCATION OF INDICATED POLES, GUYS AND OVERHEAD CABLE POWER FACILITIES.
- 8. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYORS MAKE NO GUARANTEE THE UNDERGROUND AREA, EITHER IS IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.
- 9. BEFORE YOU DIG, TO MISS THE UTILITIES CALL MISS UTILITY OF VIRGINIA, TOLL FREE 811.
- 10. DEMOLITION DEBRIS TO BE DISPOSED OF OFF-SITE AT SITE PROCURED BY CONSTRUCTION/DEMOLITION CONTRACTOR.
- 11. EXISTING STORM DRAIN SYSTEM TO REMAIN INTACT AND IN A FUNCTIONAL STATE UNLESS OTHER WISE SPECIFIED.

12. ANY DISTURBED AREAS OF THE SITE ARE TO BE GRADED TO DRAIN TO EXISTING STORM INLETS, UNLESS OTHERWISE NOTED.

- 13. UPON COMPLETION OF DEMOLITION AND FINAL GRADING ACTIVITIES, CONTRACTOR TO EXAMINE STORM DRAIN LINES WITHIN DEMOLITION'S LIMITS AND CLEAN/ROD/JET OUT ACCUMULATED SEDIMENTS.
- 15. FOR SPECIFIC DEMOLITION REQUIREMENTS REFER TO TECHNICAL SPECIFICATIONS.
- 16. ALL EXISTING PARKING METERS SHALL BE REMOVED, PAINTED AND RESET AT SPECIFIED LOCATIONS. DAMAGED POLES SHALL BE REPLACED.

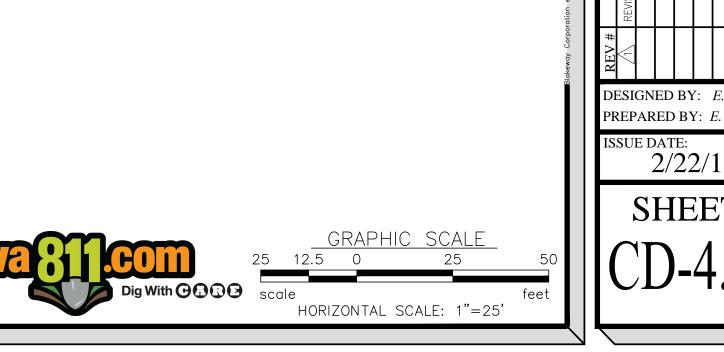
14. ALL PITS, EXCAVATIONS, TRENCHES CAUSED BY DEMOLITION ACTIVITIES SHALL BE BACKFILLED WITH SELECT MATERIAL AND COMPACTED

- 17. ALL EXISTING SIGNS SHALL BE REMOVED AND REPLACED AT ORIGINAL LOCATIONS, UNLESS OTHERWISE SPECIFIED.
- 18. NORFOLK UTILITIES SANITARY SEWER MANHOLES, SANITARY SEWER CLEANOUTS, WATER MAIN VALVE BOXES, AND WATER METER BOXES SHALL BE RESET TO FINISHED GRADE. PAVING ADJUSTMENT FRAMES SHALL NOT BE USED TO ADJUST STRUCTURES TO
- 19. CONTRACTOR SHALL OBTAIN A TREE PERMIT PRIOR TO REMOVAL OF EXISTING STREET TREES.
- 20. A CERTIFIED ARBORIST IS REQUIRED TO REMOVE OR TRIM ANY CITY OF NORFOLK TREE.

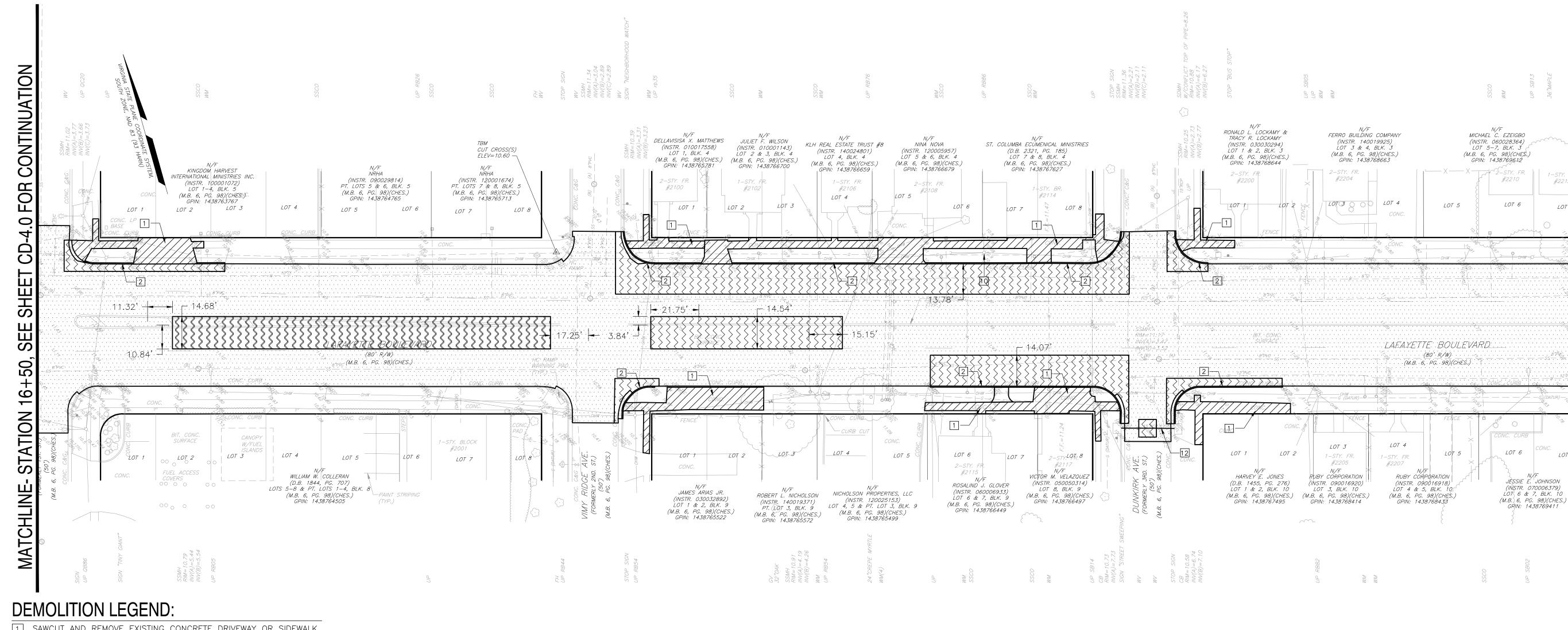
## PAVEMENT MARKING ERADICATION:

- CONTRACTOR SHALL ERADICATE ALL EXISTING PAVEMENT MARKINGS ALONG THE EAST BOUND LANES ON LAFAYETTE BOULEVARD FROM STATION 10+55 TO 13+28.
- CONTRACTOR SHALL ERADICATE ALL EXISTING PAVEMENT MARKINGS ALONG LAFAYETTE BOULEVARD FROM STATION 13+96 TO 43+45 TO ALLOW FOR PROPOSED PAVEMENT MARKINGS SHOWN ON THE PAVEMENT MARKING AND SIGNAGE PLANS.





2/22/16 SHEE



1 SAWCUT AND REMOVE EXISTING CONCRETE DRIVEWAY OR SIDEWALK

2 SAWCUT AND REMOVE EXISTING CURB AND/OR GUTTER 3 RELOCATE EXISTING SIGN. SEE PAVEMENT MARKING AND

SIGNAGE PLANS FOR PROPOSED SIGN LOCATION. 4 REMOVE EXISTING TREES AND/OR VEGETATION

5 ADJUST EXISTING STRUCTURE RIM, SEE GRADING PLANS FOR PROPOSED GRADE

CONVERT EXISTING STRUCTURE TO MANHOLE

ADJUST EXISTING UTILITY COVER TO MATCH PROPOSED GRADE. SEE GRADING PLANS FOR PROPOSED GRADE

8 RELOCATE EXISTING BANNER POLE. SEE SHEET CP-6.4 FOR PROPOSED LOCATION. 9 REMOVE EXISTING BANNER POLE LIGHT. EXISTING ELECTRICAL METER SHALL REMAIN FOR FEATURE PUBLIC ART PROJECT.

10 CONTRACTOR TO COORDINATE WITH DOMINION VIRGINIA POWER DURING ALL PHASES OF THIS PROJECT. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH DOMINION VIRGINIA POWER AND THE CITY OF NORFOLK TO DETERMINE ANY RELOCATION OF EXISTING UTILITY.

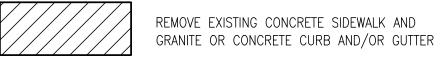
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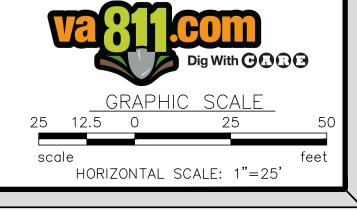
#### **DEMOLITION KEY:**

REMOVE EXISTING ASPHALT/CONCRETE PAVEMENT AND AGGREGATE BASE



MILL EXISTING ASPHALT AND/OR CONCRETE PAVEMENT TO PROVIDE A MINIMUM OF 2" PAVEMENT OVERLAY. SEE GRADING PLAN FOR PROPOSED GRADES.





STATION

**DEMOLITION** 

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE ISSUE DATE: 2/22/16

SIGNAGE PLANS FOR PROPOSED SIGN LOCATION.

4 REMOVE EXISTING TREES AND/OR VEGETATION

ADJUST EXISTING STRUCTURE RIM, SEE GRADING PLANS FOR PROPOSED GRADE

6 CONVERT EXISTING STRUCTURE TO MANHOLE

7 ADJUST EXISTING UTILITY COVER TO MATCH PROPOSED GRADE. SEE GRADING PLANS FOR PROPOSED GRADE

RELOCATE EXISTING BANNER POLE. SEE SHEET CP-6.4 FOR PROPOSED LOCATION.

9 REMOVE EXISTING BANNER POLE LIGHT. EXISTING ELECTRICAL

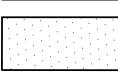
METER SHALL REMAIN FOR FEATURE PUBLIC ART PROJECT.

10 CONTRACTOR TO COORDINATE WITH DOMINION VIRGINIA POWER DURING ALL PHASES OF THIS PROJECT. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH DOMINION VIRGINIA POWER AND THE CITY OF NORFOLK TO DETERMINE ANY RELOCATION OF EXISTING UTILITY.

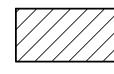
11 CONTRACTOR TO COORDINATE WITH CITY OF NORFOLK'S TRAFFIC ENGINEERING DEPARTMENT DURING ALL PHASES OF THIS PROJECT. CONTRACTOR TO USE CAUTION WHEN WORKING IN VICINITY OF UTILITY AND SHALL PROVIDE SUFFICIENT PROTECTION TO THE UTILITY DURING ANY NEARBY EXCAVATION.

### **DEMOLITION KEY:**

REMOVE EXISTING ASPHALT/CONCRETE PAVEMENT AND AGGREGATE BASE

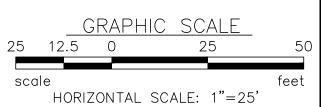


MILL EXISTING ASPHALT AND/OR CONCRETE PAVEMENT TO PROVIDE A MINIMUM OF 2" PAVEMENT OVERLAY. SEE GRADING PLAN FOR PROPOSED GRADES.



REMOVE EXISTING CONCRETE SIDEWALK AND GRANITE OR CONCRETE CURB AND/OR GUTTER





DEMOLITION PLAN

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE ISSUE DATE: 2/22/16

# DEMOLITION LEGEND:

1 SAWCUT AND REMOVE EXISTING CONCRETE DRIVEWAY OR SIDEWALK 2 SAWCUT AND REMOVE EXISTING CURB AND/OR GUTTER

3 RELOCATE EXISTING SIGN. SEE PAVEMENT MARKING AND SIGNAGE PLANS FOR PROPOSED SIGN LOCATION.

4 REMOVE EXISTING TREES AND/OR VEGETATION 5 ADJUST EXISTING STRUCTURE RIM, SEE GRADING PLANS FOR

PROPOSED GRADE 6 CONVERT EXISTING STRUCTURE TO MANHOLE

ADJUST EXISTING UTILITY COVER TO MATCH PROPOSED GRADE. SEE GRADING PLANS FOR PROPOSED GRADE 8 RELOCATE EXISTING BANNER POLE. SEE SHEET CP-6.4 FOR

PROPOSED LOCATION. 9 REMOVE EXISTING BANNER POLE LIGHT. EXISTING ELECTRICAL METER SHALL REMAIN FOR FEATURE PUBLIC ART PROJECT.

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11 CONTRACTOR TO COORDINATE WITH CITY OF NORFOLK'S TRAFFIC ENGINEERING DEPARTMENT DURING ALL PHASES OF THIS PROJECT. CONTRACTOR TO USE CAUTION WHEN WORKING IN VICINITY OF UTILITY AND SHALL PROVIDE SUFFICIENT PROTECTION TO THE UTILITY DURING ANY NEARBY EXCAVATION.

### **DEMOLITION KEY:**

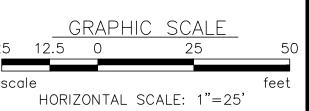
REMOVE EXISTING ASPHALT/CONCRETE PAVEMENT AND AGGREGATE BASE

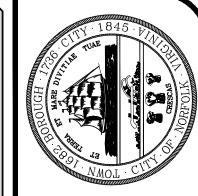


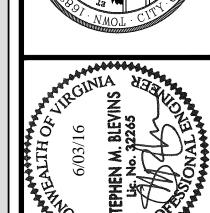
MILL EXISTING ASPHALT AND/OR CONCRETE PAVEMENT TO PROVIDE A MINIMUM OF 2" PAVEMENT OVERLAY. SEE GRADING PLAN FOR PROPOSED GRADES.



REMOVE EXISTING CONCRETE SIDEWALK AND GRANITE OR CONCRETE CURB AND/OR GUTTER





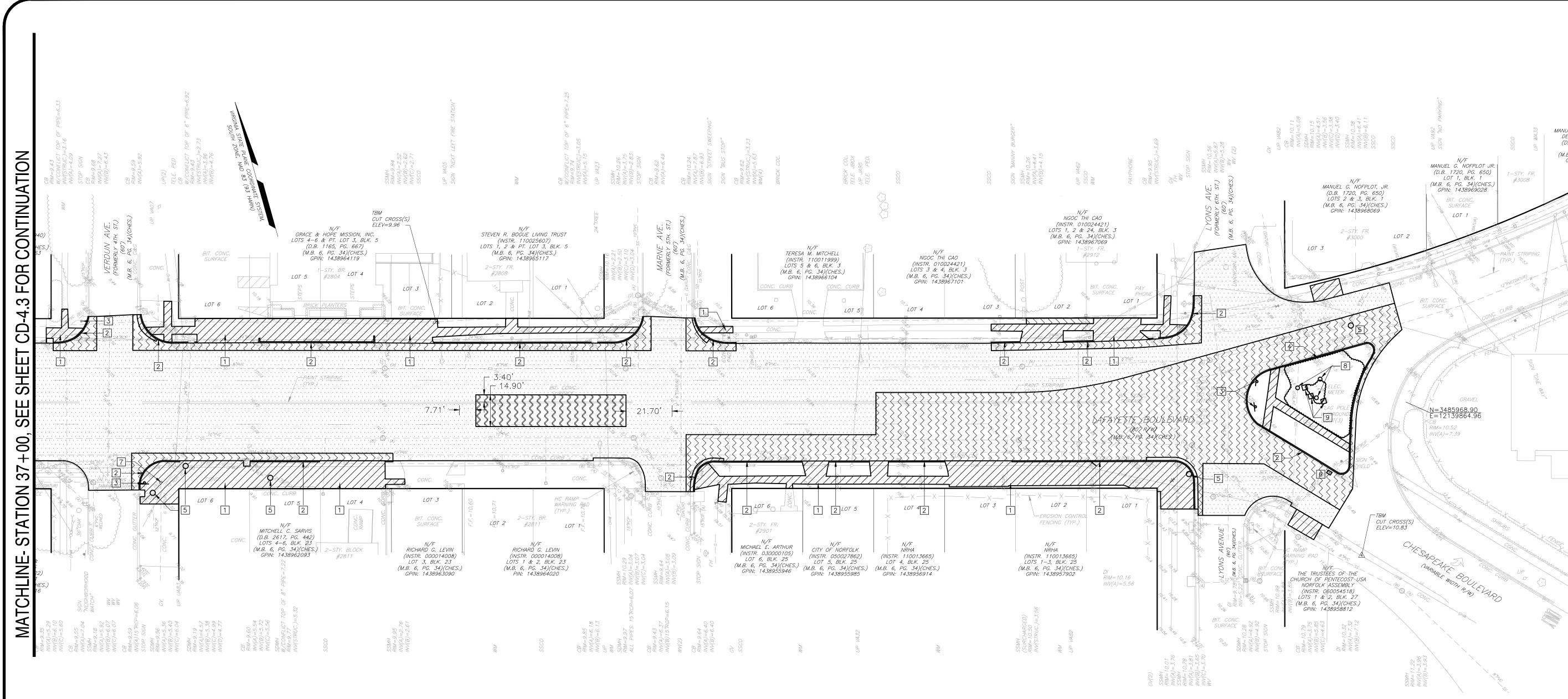


DEMOLITION PL

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE ISSUE DATE: 2/22/16

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# **DEMOLITION LEGEND:**

1 SAWCUT AND REMOVE EXISTING CONCRETE DRIVEWAY OR SIDEWALK

- 2 SAWCUT AND REMOVE EXISTING CURB AND/OR GUTTER
- 3 RELOCATE EXISTING SIGN. SEE PAVEMENT MARKING AND SIGNAGE PLANS FOR PROPOSED SIGN LOCATION.
- 4 REMOVE EXISTING TREES AND/OR VEGETATION
- 5 ADJUST EXISTING STRUCTURE RIM, SEE GRADING PLANS FOR PROPOSED GRADE
- CONVERT EXISTING STRUCTURE TO MANHOLE
- ADJUST EXISTING UTILITY COVER TO MATCH PROPOSED GRADE. SEE GRADING PLANS FOR PROPOSED GRADE
- 8 RELOCATE EXISTING BANNER POLE. SEE SHEET CP-6.4 FOR PROPOSED LOCATION.
- 9 REMOVE EXISTING BANNER POLE LIGHT. EXISTING ELECTRICAL
- METER SHALL REMAIN FOR FEATURE PUBLIC ART PROJECT.
- 10 CONTRACTOR TO COORDINATE WITH DOMINION VIRGINIA POWER DURING ALL PHASES OF THIS PROJECT. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH DOMINION VIRGINIA POWER AND THE CITY OF NORFOLK TO DETERMINE ANY RELOCATION OF EXISTING UTILITY.
- 11 CONTRACTOR TO COORDINATE WITH CITY OF NORFOLK'S TRAFFIC ENGINEERING DEPARTMENT DURING ALL PHASES OF THIS PROJECT. CONTRACTOR TO USE CAUTION WHEN WORKING IN VICINITY OF UTILITY AND SHALL PROVIDE SUFFICIENT PROTECTION TO THE UTILITY DURING ANY NEARBY EXCAVATION.

## **DEMOLITION KEY:**

REMOVE EXISTING ASPHALT/CONCRETE PAVEMENT AND AGGREGATE BASE

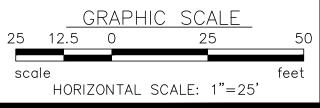


MILL EXISTING ASPHALT AND/OR CONCRETE PAVEMENT TO PROVIDE A MINIMUM OF 2" PAVEMENT OVERLAY. SEE GRADING PLAN FOR PROPOSED GRADES.



REMOVE EXISTING CONCRETE SIDEWALK AND GRANITE OR CONCRETE CURB AND/OR GUTTER



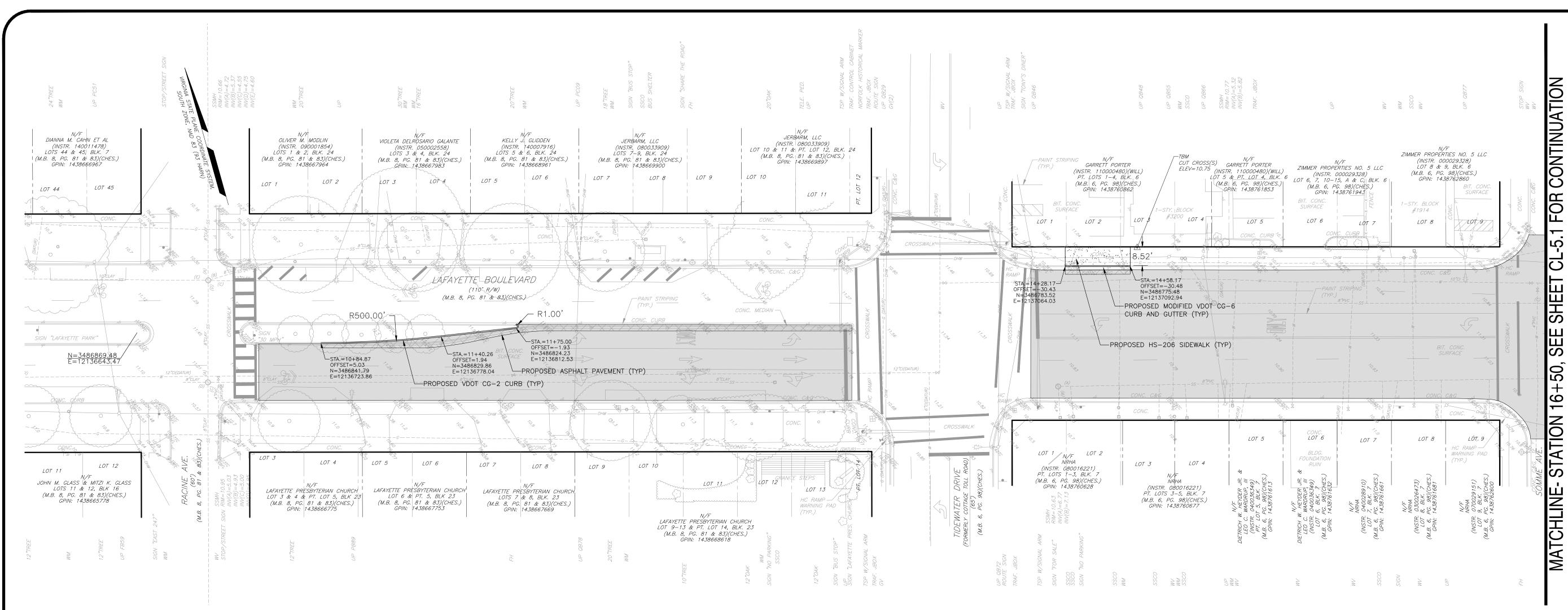




DEMOLITION PLAN

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE ISSUE DATE:

2/22/16



### LAYOUT GENERAL NOTES:

- 1. <u>CONSTRUCTION STAKEOUT</u> ALL CONSTRUCTION STAKEOUT SHALL BE PERFORMED BY A LICENSED SURVEYOR.
- 2. PRIVATE UTILITY COORDINATION CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REMOVAL/RELOCATING OF ANY PRIVATE UTILITIES WITH THE APPROPRIATE UTILITY COMPANY.
- 3. <u>CONSTRUCTION MATERIALS AND METHODS</u> SHALL CONFORM TO CITY STANDARDS.
- 4. <u>EXCAVATED MATERIAL</u> SHALL BE DISPOSED OF IN A LAWFUL MANNER.

#### **CONSTRUCTION GENERAL NOTES:**

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REMOVAL/RELOCATING OF ANY PRIVATE UTILITIES WITH THE APPROPRIATE UTILITY COMPANY.
- 2. ALL CRACKED CONCRETE WITHIN THE RIGHT OF WAY SHALL BE REMOVED TO THE NEAREST JOINT AND REPLACED. PATCHING IS NOT ACCEPTABLE.
- 3. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO CITY OF NOROFLK STANDARDS.
- 4. ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF IN A LAWFUL MANNER.
- 5. THIS PLAN DOES NOT GUARANTEE THE EXISTENCE, NON-EXISTENCE, SIZE TYPE, LOCATION, ALIGNMENT OR DEPTH OF ANY OR ALL UNDERGROUND UTILITIES OR OTHER FACILITIES, WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNER'S RECORDS AND/OR ELECTRONIC LINE TRACING, THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM WHATEVER TEST EXCAVATIONS OR OTHER INVESTIGATIONS ARE NECESSARY TO VERIFY LOCATIONS AND CLEARANCES AND SHALL REPORT IMMEDIATELY ANY DISCREPANCIES TO BLAKEWAY CORPORATION AT 757-226-0081.

### **RIGHT-OF-WAY NOTES:**

- 1. RIGHT-OF-WAY EXCAVATION PERMITS ARE REQUIRED TO PERFORM EXCAVATION WORK IN THE RIGHT-OF-WAY. PLEASE CONTACT THE RIGHT-OF-WAY PERMIT OFFICE AT 757-664-7306 OR AT WWW.NORFOLK.GOV/PUBLICWORKS/ROW.ASP
- 2. WHEN A NEW APRON AND/OR SIDEWALK ARE INSTALLED, ALL NEW OR EXISTING UTILITY STRUCTURES SHALL BE INSTALLED AND/OR RELOCATED OUTSIDE THE AREA OF THE NEW APRON AND/OR SIDEWALK. A PERMIT AND INSPECTIONS ARE REQUIRED. PLEASE CONTACT THE RIGHT-OF-WAY PERMITS OFFICE AT 757-664-7306 OR AT WWW.NORFOLK.GOV/PUBLICWORKS/ROW.ASP
- 3. ALL MISS UTILITY MARKINGS IN THE RIGHT-OF-WAY ARE REQUIRED TO BE ERADICATED AT THE COMPLETION OF THIS PROJECT IN ACCORDANCE WITH THE CITY'S ROW EXCAVATION & RESTORATION MANUAL LOCATED AT WWW.NORFOLK.GOV/PUBLICWORKS/ROW.ASP.

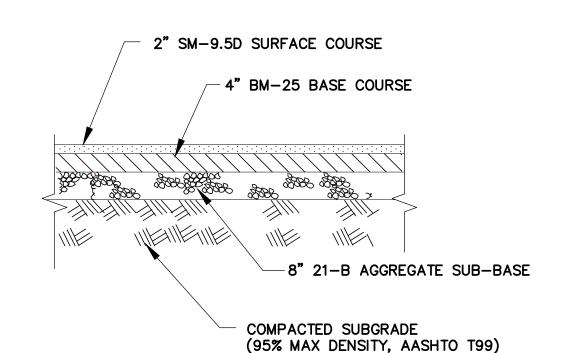
## **PAVEMENT NOTES:**

- 1. PAVEMENT REPLACEMENT AND DESIGN IN THE CITY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE CITY OF NORFOLK SPECIFICATIONS AND STANDARDS..
- 2. MATERIALS DETERMINED UNSUITABLE FOR FOUNDATIONS, SUBGRADES, OR THEIR ROADWAY PURPOSES WITHIN THE LIMITS OF CONSTRUCTION, SHALL BE EXCAVATED BY THE CONTRACTOR, AT HIS OWN EXPENSE, BELOW THE GRADE SHOWN ON PLANS AND THE AREAS SO EXCAVATED SHALL BE BACKFILLED WITH APPROVED SUITABLE MATERIALS. EXCAVATED MATERIALS SUITABLE FOR BACKFILL SHALL BE STOCKPILED SO AS NOT TO INTERFERE WITH DRAINAGE. UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE SITE.
- 3. PAVEMENT MARKING AND CROSSWALK STAMPING TO BE COMPLETED BY THE CONTRACTOR. CONTRACTOR SHALL COORDINATE WITH THE CITY OF NORFOLK TO ENSURE THAT PAVEMENT MARKINGS ARE PLACED AS SHOWN BEFORE PROJECT COMPLETION.

#### **INCIDENTAL CONCRETE NOTES:**

- 1. ALL CONCRETE SHALL BE CLASS "A-3" AIR ENTRAINED (3,000 PSI) IN ACCORDANCE TO SECTION 219 OF THE 1991 VIRGINIA DEPARTMENT OF TRANSPORTATION ROADS AND BRIDGE SPECIFICATIONS UNLESS OTHERWISE SPECIFIED.
- 2. CURB AND GUTTER SHALL BE CONSTRUCTED IN SECTIONS OF UNIFORM LENGTHS,
  APPROXIMATELY TEN (10') FEET (NO SECTION SHALL BE LESS THAN SIX (6) FEET).
  EXPANSION JOINTS SHALL BE FORMED AT INTERVALS OF ONE HUNDRED FEET (100') USING
  1/2" PREMOLDED BITUMINOUS FIBER JOINT FILLER. CONSTRUCTION JOINTS ARE REQUIRED AS FOLLOWS:

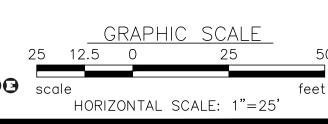
CURB & GUTTER ----- 100' SIDEWALK 6' WIDTH ---- 48'



# TYPICAL PAVEMENT SECTION

NOT TO SCALE

Va Sig With @ 3 © scale





ASPHALT PAVEMENT OVERLAY (MIN OF 2")

NEW ASPHALT PAVEMENT SECTION

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ng + engineering + environmental

E CIR - VA BEACH, VIRGINIA 23455

26.0081 - F757.226.8765

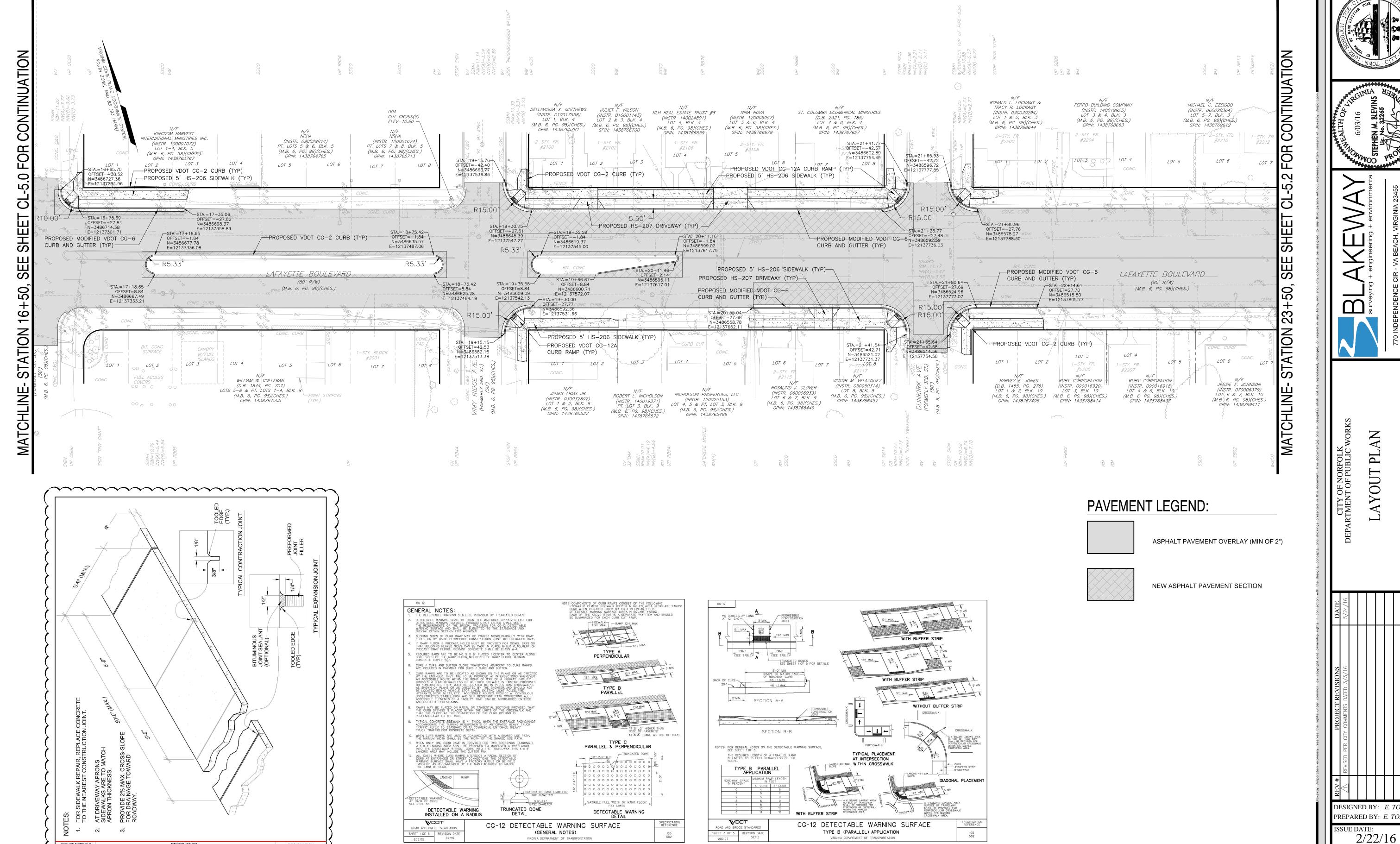
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770 INDEPENDENCE CIR - VA BEACH,
P757.226.0081 - F757.226.8

CAYOUT PLAN

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	DATE	5/24/16						
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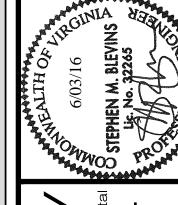
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STANDARD SIDEWALK DETAIL

DEPT. OF PUBLIC WORKS SCALE NOT TO SCALE NCDS2014.06 REVISED JUN.2014

HS-206

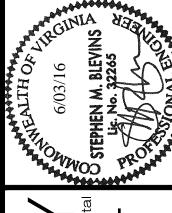


DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE

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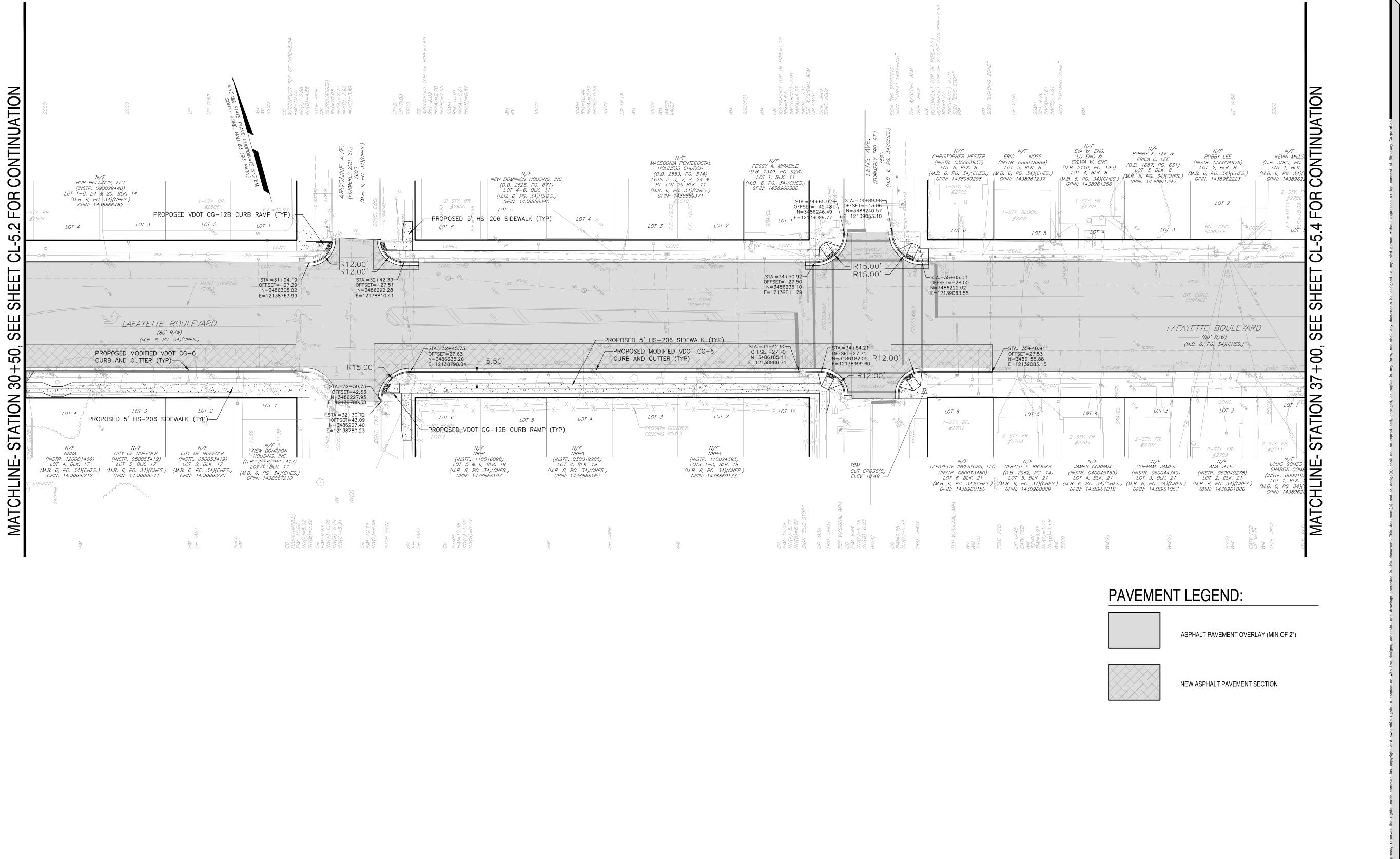
GRAPHIC SCALE

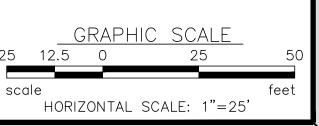
HORIZONTAL SCALE: 1"=25'



DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLI

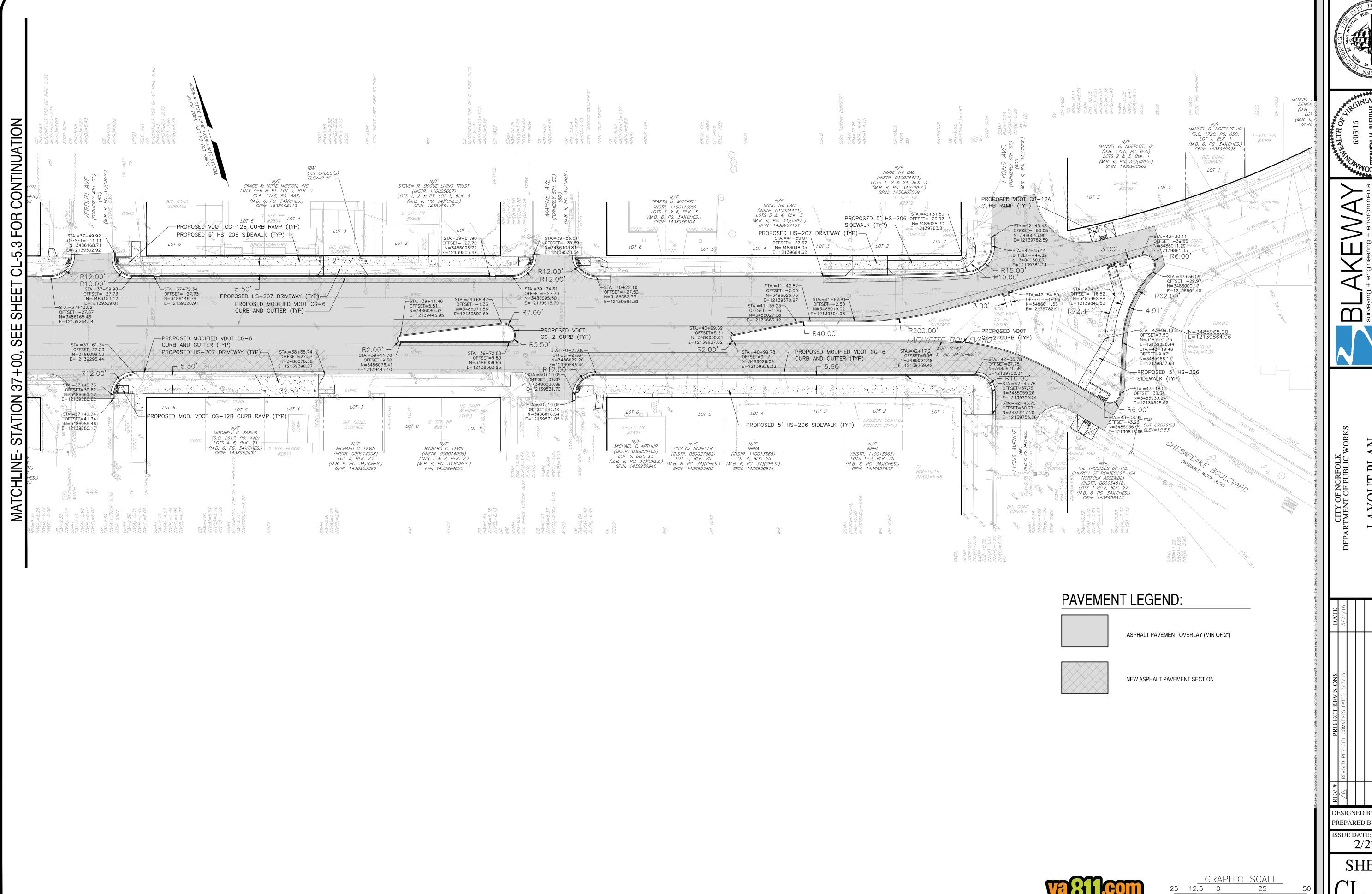
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DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE

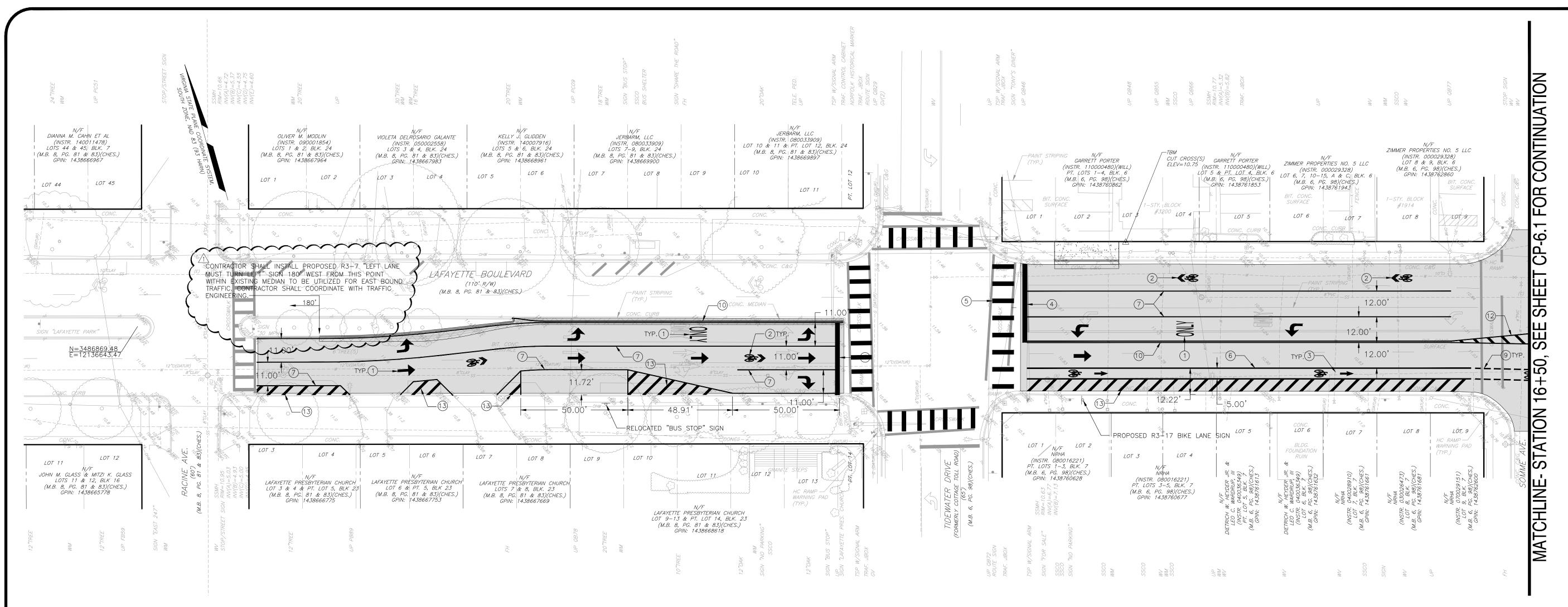
ISSUE DATE: 2/22/16





PREPARED BY: E. TOLLE

ISSUE DATE: 2/22/16 **SHEET** 



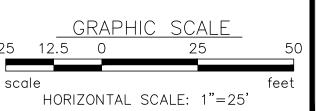
# PAVEMENT MARKING LEGEND:

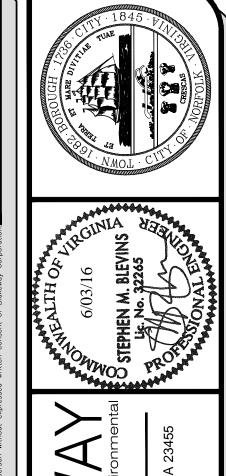
- (1) PAVEMENT LEGEND, COLOR: WHITE
- (2) "SHARED" BICYCLE LANE LEGEND, COLOR: WHITE
- (3) "DESIGNATED" BICYCLE LANE LEGEND, COLOR: WHITE
- (4) 24" STOP BAR, COLOR: WHITE
- (5) CROSSWALK, COLOR: WHITE
- (6) 6" SOLID LINE, COLOR: WHITE (7) 4" SOLID LINE, COLOR: WHITE
- (8) 4" SOLID LINE, COLOR: YELLOW
- (9) 4" MINI SKIP LINE, COLOR: WHITE (10) TWO WAY BARRIER, COLOR: YELLOW
- (11) ONE WAY BARRIER, COLOR: YELLOW
- (12) CHEVRON, COLOR: YELLOW (13) CHEVRON, COLOR: WHITE
- (14) DOUBLE CHEVRON, COLOR: WHITE



TYPICAL CROSS-SECTION NOT TO SCALE



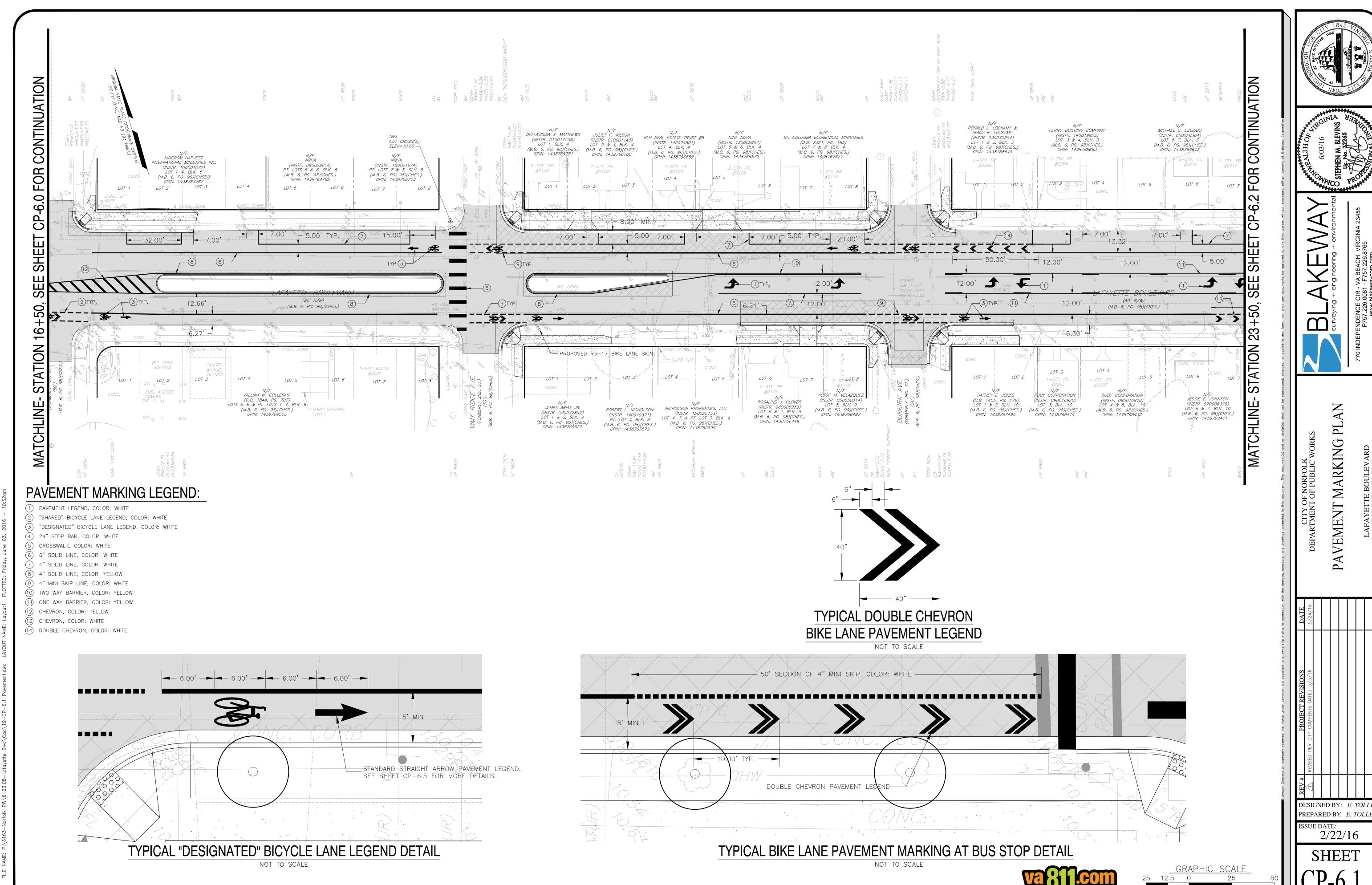




PAVEMENT MARKING

DAT	5/24/	1/80/9							
PROJECT REVISIONS	REVISED PER CITY COMMENTS DATED 3/3/16	CITY ADDED CROSSWALK BARS AT TIDEWATER DR							
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|PREPARED BY: *E. TOLLE* ISSUE DATE: 2/22/16

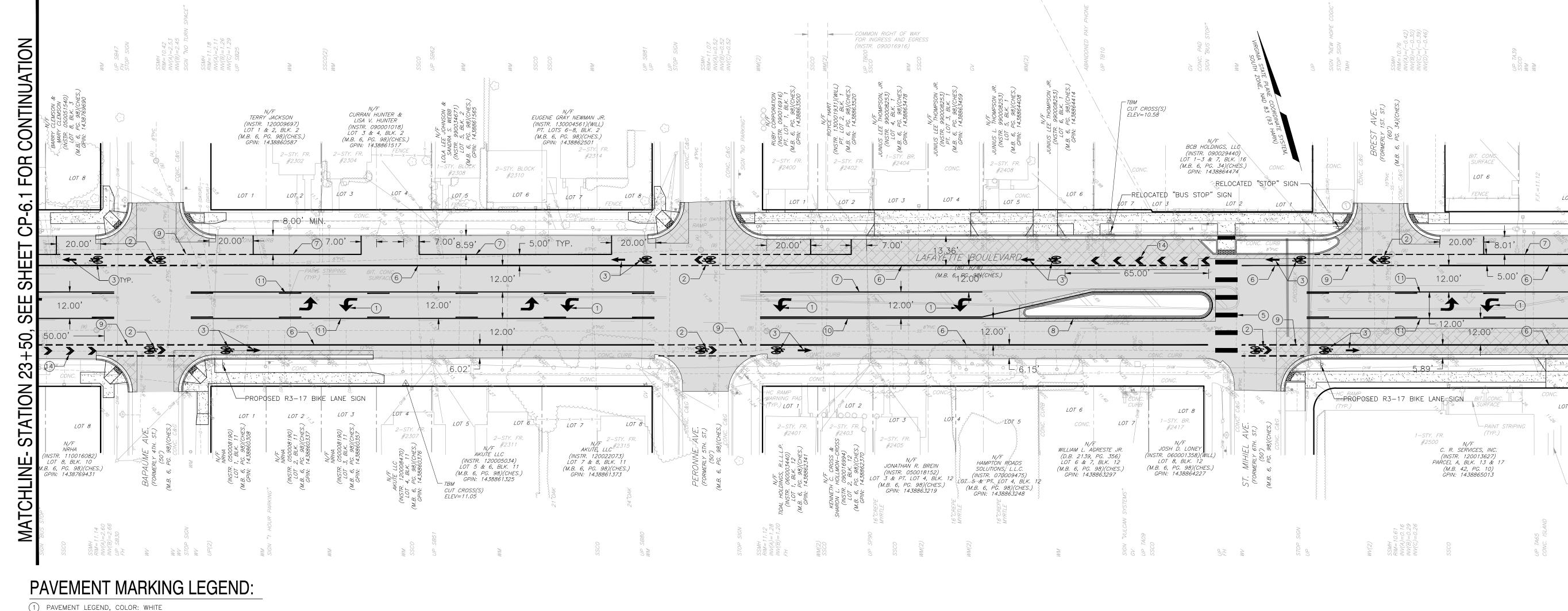


**VEMENT MARKING** 

2/22/16

SHEET

HORIZONTAL SCALE: 1"=25'



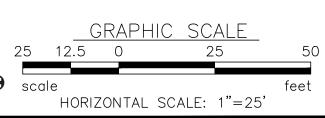
- (5) CROSSWALK, COLOR: WHITE
- 6) 6" SOLID LINE, COLOR: WHITE
- (9) 4" MINI SKIP LINE, COLOR: WHITE
- (12) CHEVRON, COLOR: YELLOW

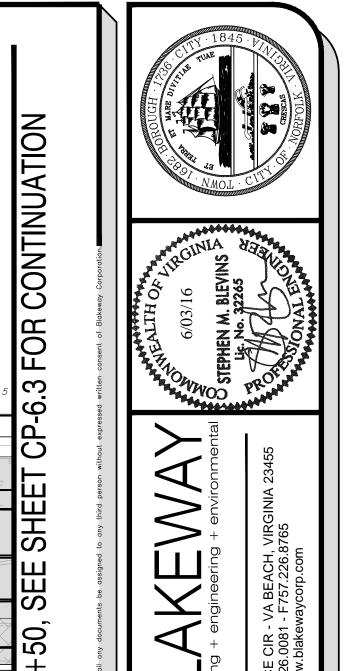
(4) 24" STOP BAR, COLOR: WHITE

(7) 4" SOLID LINE, COLOR: WHITE (8) 4" SOLID LINE, COLOR: YELLOW

(10) TWO WAY BARRIER, COLOR: YELLOW (11) ONE WAY BARRIER, COLOR: YELLOW

(13) CHEVRON, COLOR: WHITE (14) DOUBLE CHEVRON, COLOR: WHITE





PAVEMENT MARKING

MATCHLINE- STATION

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE

ISSUE DATE: 2/22/16

2) "SHARED" BICYCLE LANE LEGEND, COLOR: WHITE (3) "DESIGNATED" BICYCLE LANE LEGEND, COLOR: WHITE

(4) 24" STOP BAR, COLOR: WHITE (5) CROSSWALK, COLOR: WHITE

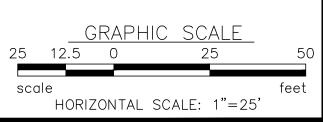
(6) 6" SOLID LINE, COLOR: WHITE (7) 4" SOLID LINE, COLOR: WHITE

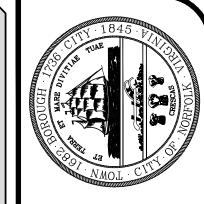
(8) 4" SOLID LINE, COLOR: YELLOW 9) 4" MINI SKIP LINE, COLOR: WHITE

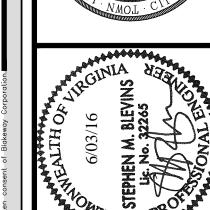
10 TWO WAY BARRIER, COLOR: YELLOW (11) ONE WAY BARRIER, COLOR: YELLOW (12) CHEVRON, COLOR: YELLOW

14) DOUBLE CHEVRON, COLOR: WHITE

(13) CHEVRON, COLOR: WHITE



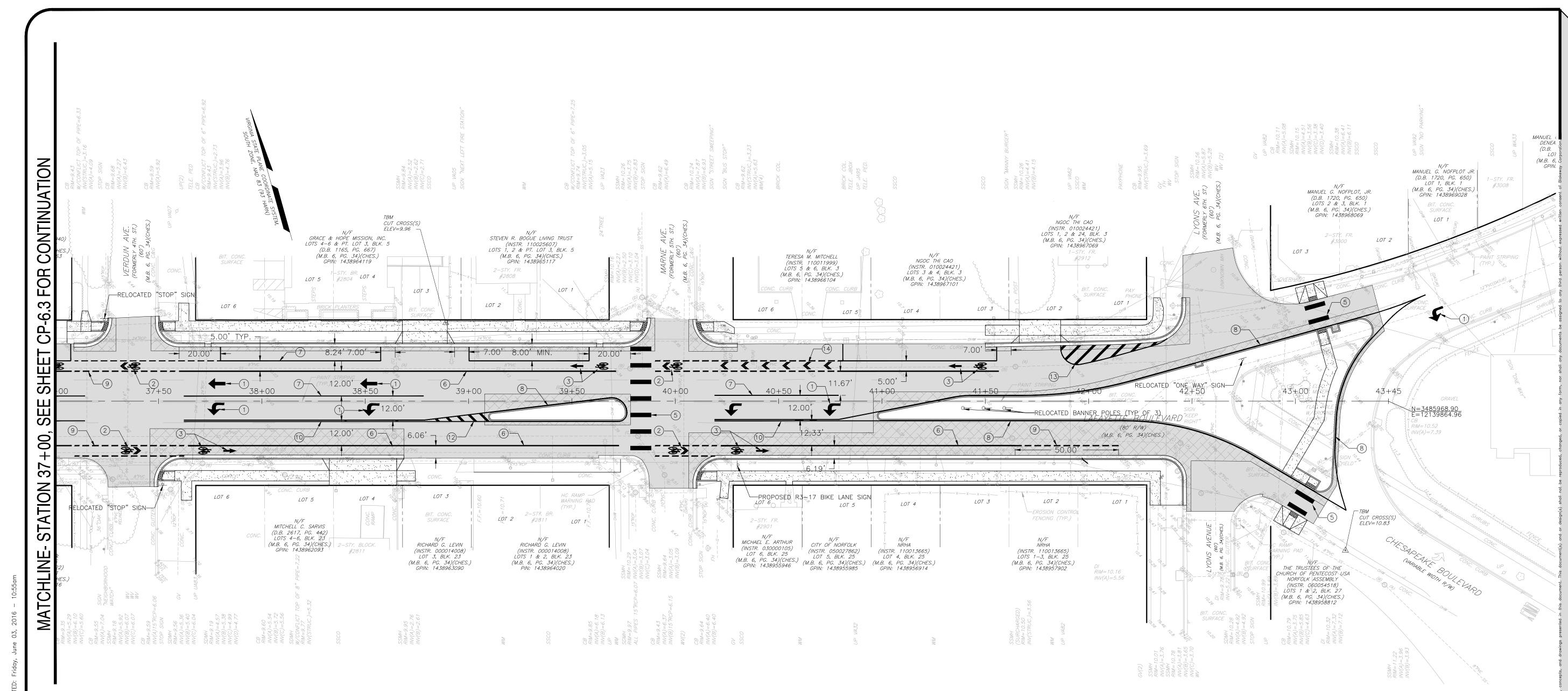




PAVEMENT MARKING

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE ISSUE DATE:

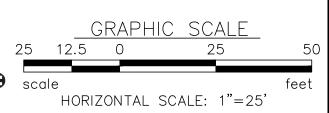
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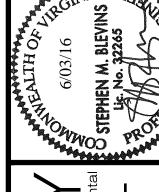
# PAVEMENT MARKING LEGEND:

- (1) PAVEMENT LEGEND, COLOR: WHITE
- (2) "SHARED" BICYCLE LANE LEGEND, COLOR: WHITE (3) "DESIGNATED" BICYCLE LANE LEGEND, COLOR: WHITE
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- (12) CHEVRON, COLOR: YELLOW (13) CHEVRON, COLOR: WHITE
- 14) DOUBLE CHEVRON, COLOR: WHITE





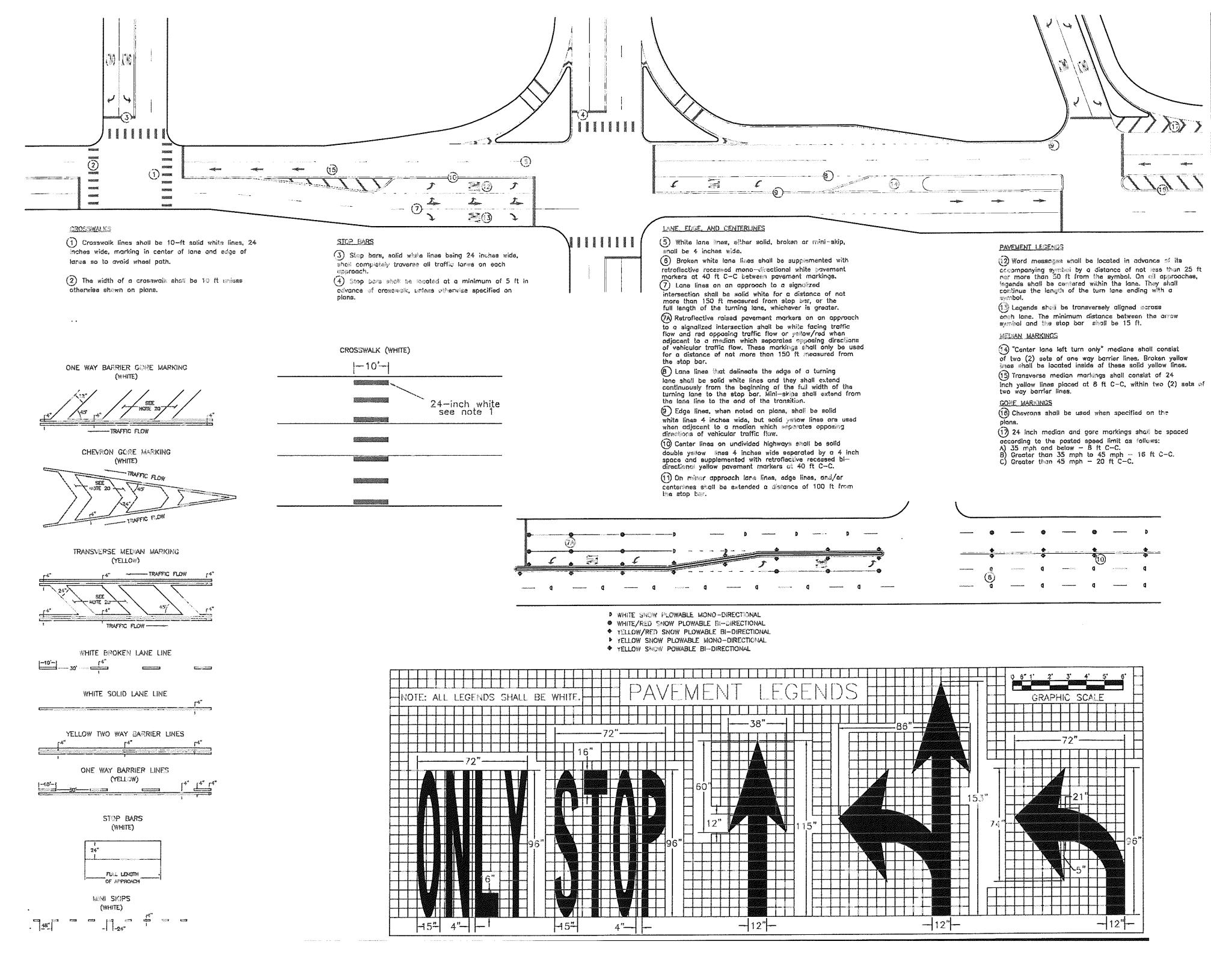




PAVEMENT MARKING

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE ISSUE DATE:

2/22/16 SHEET



GENERAL NOIES

MATERIALS AND WORKMANSHIP SHALL CONFURM TO THE CITY SPECIFICATIONS.

ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE REGULATIONS GOVERNING THE DESIGN, LOCATION, AND OFFRATION OF ALL OFFICIAL TRAFFIC SIGNS, SIGNALS, AND MARKINGS ON AND ALONG HIGHWAYS WITHIN THE COMMONWEALTH OF VIRGINIA.

ALL PAVEMENT MARKINGS SHALL BE REFLECTORIZED.

THE CONTRACTOR SHALL PREPARE THE PAVEMENT SURFACE FOR THE PROPER ADHESION, ANY SWEEPING OR REMOVAL OF DEBRIS, GRAVEL, DIRT, OR OTHER FOREIGN MATERIALS SHALL BE CONSIDERED AS INCIDENTAL TO THE INSTALLATION, AND NO SEPARATE PAYMENT MADE THEREOF.

THE CONTRACTOR SHALL REMOVE ALL PREVIOUS PAVEMENT MARKINGS, WHICH IN THE OPINION OF THE ENGINEER, CONFLICT WITH THE NEW PAVEMENT MARKINGS.

THE CONTRACTOR SHALL NOTE ALL SPECIAL PROVISIONS OF THE CONTRACT AND SPECIFICALLY WITH REGARDS TO: THE RATE OF APPLICATION, MAINTENANCE OF TRAFFIC, RESTRICTED WORKING HOURS, AND/OR RESTRICTED WEATHER CONDITIONS.

UNLESS SPECIFIED OTHERWISE, THE BASIS OF MEASUREMENT SHALL BE ALONG THE LONGITUDINAL CENTER LINE OF PAVEMENT MARKINGS. MEASUREMENT FOR LEGENDS SHALL BE PER MESSAGE, COMPLETE AND IN PLACE.

PRIOR TO APPLICATION, THE CONTRACTOR SHALL FIELD CHECK AND LOCATE ALL PAVEMENT MARKINGS, TO THE SATISFACTION OF THE ENGINEER.

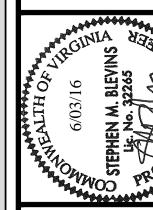
ALL MARKINGS IMPROPERLY APPLIED OR LOCATED SHALL BE COMPLETELY REMOVED AND CORRECTLY RE-APPLIED, AT THE SOLE EXPENSE OF THE CONTRACTOR.

WHERE BITUMINOUS SEALANTS PREVENTS OR MAKES IMPRACTICAL THE EXTENDING OF LINES TO FACE OF CURB, THE CONTRACTOR SHALL EXTEND LINES TO END OF SEALANT OR WITHIN ONE FOOT OF THE FACE OF CURB, WHICHEVER IS LESS.

THERMOPLASTIC PAVEMENT MARKINGS SHALL NOT BE INSTALLED AT ANYTIME WITHIN A FORTY-EIGHT (48) HOUR PERIOD FOLLOWING A RAINFALL

THE COLORS SHALL CONFORM TO STANDARD HIGHWAY COLORS THROUGHOUT THE EXPECTED LIFE OF THE FILM.

MARKING MATERIAL SHALL BE APPLIED AT THE SPECIFIED WIMENSIONS AND AT A RATE TO RESUM IN A MARKING THICKNESS OF 90 MILS (NOT INCLUDING GLASS BEAD TOP DRESSING).



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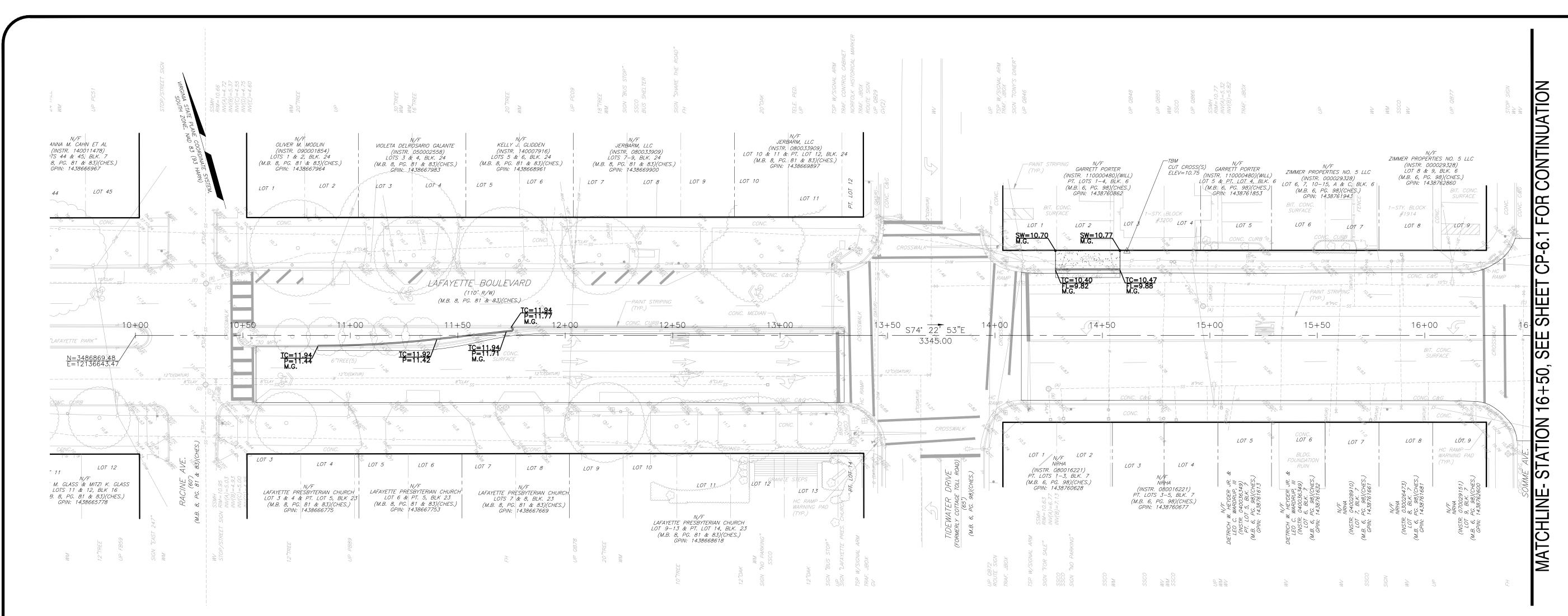
NOTES S.S. AND DETAIL

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DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE ISSUE DATE:

> 2/22/16 SHEE

GRAPHIC SCALE HORIZONTAL SCALE: 1"=25'



# LEGEND OF GRADE NOTATIONS

FL = FLOW LINE OF GUTTER

= ASPHALT OR CONCRETE PAVEMENT SURFACE

= SIDEWALK SURFACE

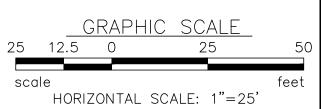
G = GROUND SURFACE M.G. = MATCH EXISTING GRADE

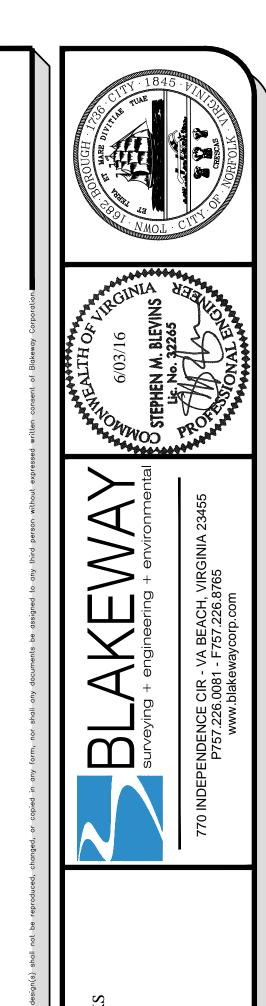
H.P. = HIGH POINT OF GRADED SURFACE

# NOTES:

- 1. ALL CROSS AND LONGITUDINAL SLOPES ALONG ALL ACCESSIBLE ROUTES SHALL BE INSTALLED IN ACCORDANCE WITH ICC/ANSI A117.1, 2003 EDITION
- 2. ALL STORM STRUCTURES SHALL MEET CITY STANDARDS. ALL STRUCTURES WITHIN THE RIGHT—OF—WAY SHALL MEET VDOT STANDARDS. ALL PIPE LENGTHS ARE FROM CENTER OF STRUCTURE.
- 3. ALL CONCRETE PIPE WITHIN THE RIGHT-OF-WAY OR SUBJECT TO TRAFFIC MUST BE CLASS III.







GRADING PLAN

ROJECT REVISIONS DATE
COMMENTS DATED 3/3/16 5/24/16

REV # PROJECT REVISIONS

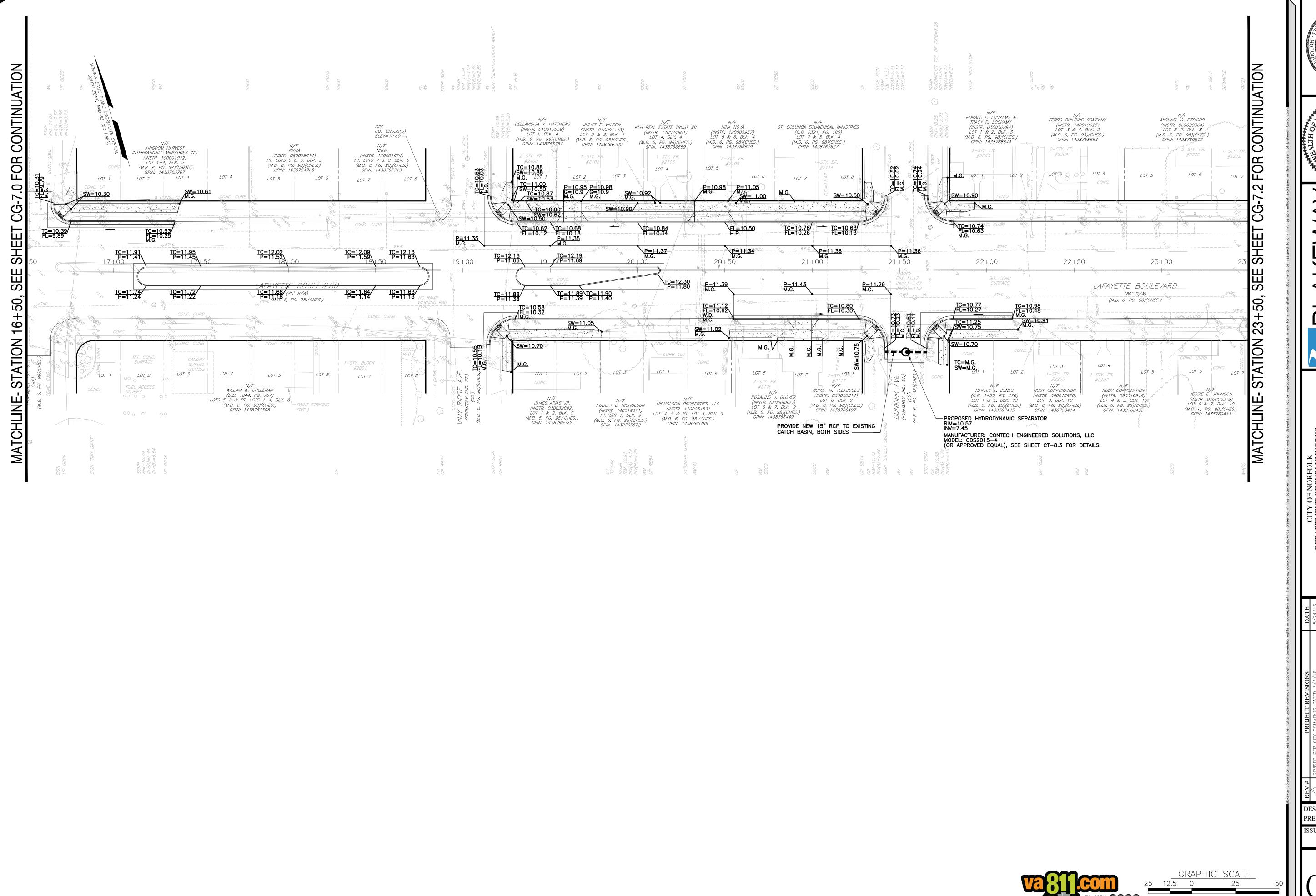
A REVISED PER CITY COMMENTS DATED 3/3/16

DESIGNED BY: E. TOLLE
PREPARED BY: E. TOLLE

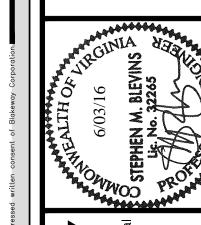
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RADING PLAN

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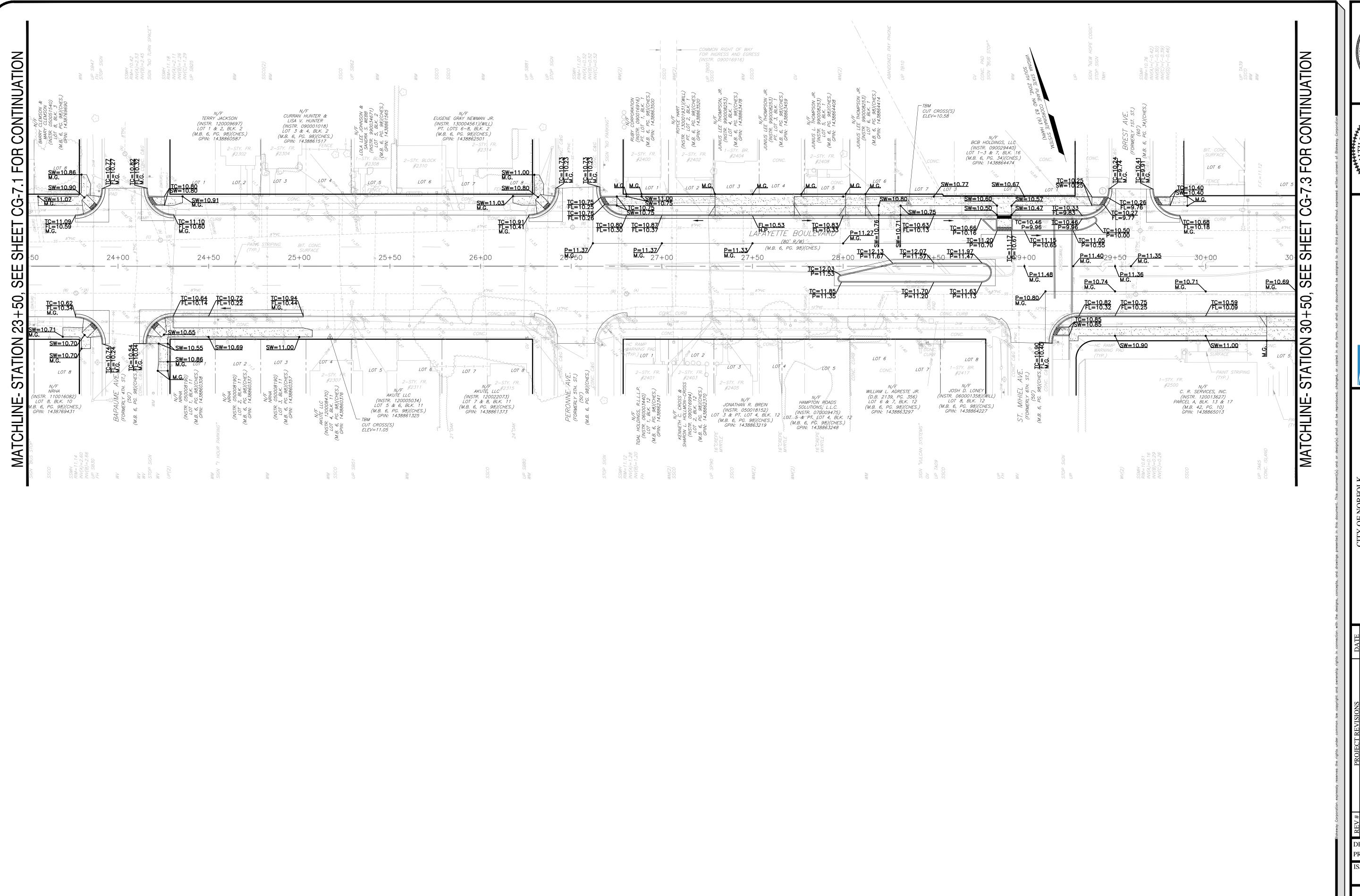
REVISED PER CITY COMMENTS DATED 3/3/16 5/2

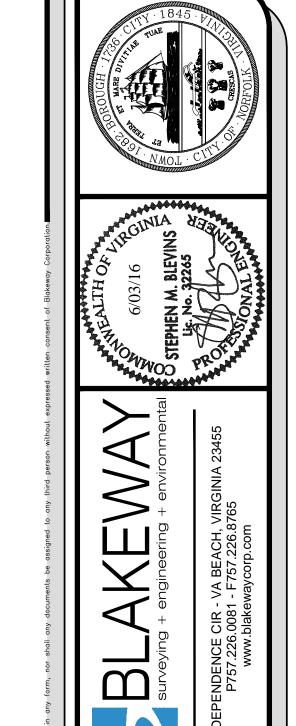
DESIGNED BY: E. TOLL
PREPARED BY: E. TOLL
ISSUE DATE:

ISSUE DATE: 2/22/16

SHEET CG-7.1

HORIZONTAL SCALE: 1"=25"





CITY OF NORFOLK
DEPARTMENT OF PUBLIC WO
GRADING PLAI

REV # PROJECT REVISIONS DATE

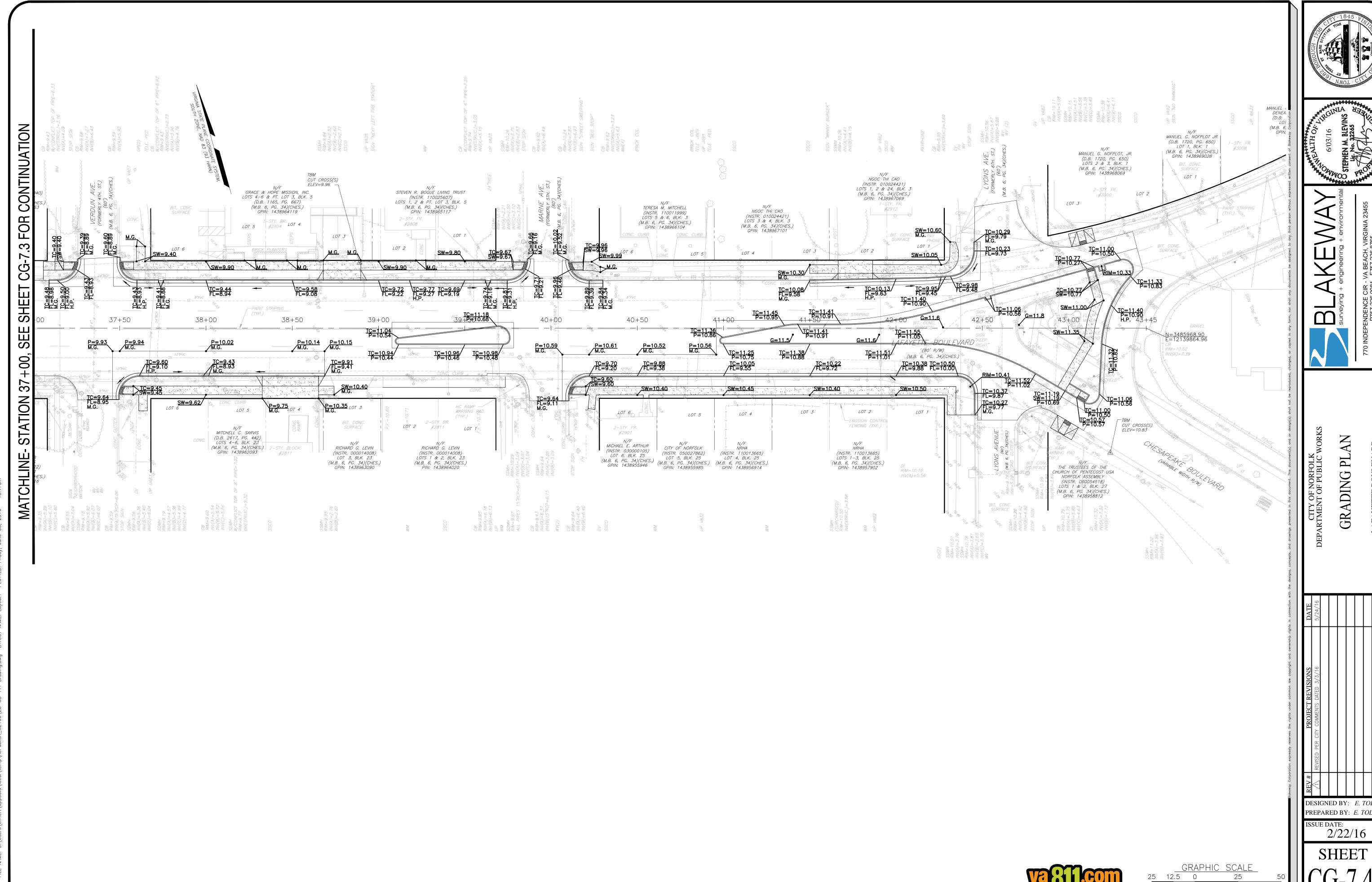
A REVISED PER CITY COMMENTS DATED 3/3/16 5/24/1

5/24/1

DESIGNED BY: E. TOLLE
PREPARED BY: E. TOLLE
ISSUE DATE:

ISSUE DATE:
2/22/16
SHEET

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RADING PLAN

LAFAYETTE BOULEVARD NORFOLK, VIRGINIA

PREPARED BY: E. TOLLE

PHASE 1 - DETOUR ROUTING MAP

### PHASE 1 - DETOUR ROUTING NOTES:

CONTRACTOR SHALL PROVIDE ALL DETOUR SIGNAGE NECESSARY ALONG ALL DETOUR ROUTES SHOWN. THE FOLLOWING DETOUR ROUTES SHALL BE ENFORCED DURING FULL ROAD CLOSURE OF LAFAYETTE BOULEVARD TO THROUGH TRAFFIC.

- TRAFFIC ON TIDEWATER DRIVE TRAVELING NORTH TRAFFIC SHALL BE DETOURED TO CROMWELL DRIVE
- TRAFFIC ON TIDEWATER DRIVE TRAVELING SOUTH TRAFFIC SHALL BE DETOURED TO PRINCESS ANNE ROAD
- TRAFFIC ON CHESAPEAKE BOULEVARD/CROMWELL DRIVE TRAVELING NORTH TRAFFIC SHALL BE DETOURED TO CROMWELL DRIVE
- TRAFFIC ON CHESAPEAKE BOULEVARD TRAVELING SOUTH TRAFFIC SHALL BE DETOURED TO PRINCESS ANNE ROAD

#### TEMPORARY TRAFFIC CONTROL NOTES

- 1) THE CITY OF NORFOLK, TRANSPORTATION DEPARTMENT IS RESPONSIBLE FOR REVIEWING AND APPROVING ALL TRAFFIC MAINTENANCE AND CONTROL PLANS AND REVIEWING THE SEQUENCE OF CONSTRUCTION PLANS ESSENTIAL TO COMPLETE THIS PROJECT.
- 2) ALL TRAFFIC MAINTENANCE AND CONTROL DEVICES, METHODS AND APPLICATIONS WILL CONFORM TO THE FOLLOWING PUBLICATIONS INCLUDING ALL CURRENT EDITIONS AND REVISIONS:
- MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS ISSUED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.(MUTCD)
- VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS VOL. II.
- VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS.
- VIRGINIA DEPARTMENT OF TRANSPORTATION WORK AREA PROTECTION MANUAL.
- CITY OF NORFOLK, PUBLIC WORKS SPECIFICATIONS AND STANDARDS MANUAL.
- 3) WORK HOURS IN ROADWAY OPEN TO TRAFFIC AND/OR PEDESTRIAN AREA:
- FOR WORK ON LAFAYETTE BOULEVARD FROM RACINE AVENUE TO CHESAPEAKE BOULEVARD, WORK HOURS SHALL BE MONDAY THROUGH SATURDAY, BETWEEN THE HOURS OF 9:00
- FOR WORK ON LAFAYETTE BOULEVARD THAT WILL REQUIRE FULL ROAD CLOSURE, WORK HOURS SHALL BE SATURDAY AND SUNDAY ONLY, BETWEEN THE HOURS OF 9:00 A.M. AND
- HOLIDAYS: NO WORK MAY BE COMPLETED IN THE ROADWAY OR PEDESTRIAN AREAS UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE CITY.
- ADDITIONAL RESTRICTIONS MAY APPLY BASED ON TRAFFIC CONDITIONS.

EXTENDED WORK HOURS AND WORK DAYS MAY BE REQUESTED WITH A WRITTEN REQUEST TO THE OWNER. THIS REQUEST MUST BE SUBMITTED AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE EXTENDED WORK PERIODS. (PLEASE NOTE THAT IF WORK IS TO BE CONDUCTED IN THE RESORT AREA, CERTAIN RESTRICTIONS APPLY FROM APRIL TO OCTOBER. PLEASE CONTACT TRAFFIC ENGINEERING FOR THESE RESTRICTIONS).

- 4) TRAFFIC CONTROL PLANS:TRAFFIC CONTROL PLANS ARE INCLUDED IN THE CONSTRUCTION PLANS FOR THE REFERENCED PROJECT; HOWEVER, FIELD CONDITIONS MAY REQUIRE MODIFICATIONS. IF THE CONTRACTOR FEELS THAT THE TRAFFIC CONTROL PLAN(S) INCLUDED WITH THIS PROJECT DOES NOT SUIT CONDITIONS AT A WORK SITE, THEN THE CONTRACTOR SHALL SUBMIT TO THE OWNER A REVISED PLAN TO MAINTAIN TRAFFIC. THE REVISED PLAN SHALL INCLUDE SITE SPECIFIC TRAFFIC DETAILS AND SHALL IDENTIFY THE SEQUENCE OF CONSTRUCTION. THE CONTRACTOR WILL SUBMIT THE REVISED TRAFFIC CONTROL PLAN(S) A MINIMUM 10 CALENDAR DAYS PRIOR TO THE START OF WORK. THE CONTRACTOR WILL NOT DISRUPT TRAFFIC PATTERNS UNTIL THE OWNER HAS APPROVED THE REVISED TRAFFIC CONTROL PLAN. THE OWNER RESERVES THE RIGHT TO MODIFY ANY TRAFFIC CONTROL PLAN(S) AS NECESSARY IN THE INTEREST OF PUBLIC SAFETY OR TRAFFIC EFFICIENCY. PRIOR TO BEGINNING WORK, IT IS THE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL REQUIREMENTS HAVE BEEN MET AND THAT ALL TRAFFIC CONTROL DEVICES HAVE BEEN INSTALLED ACCORDING TO THE APPROVED TRAFFIC CONTROL PLAN(S).
- 5) THE CONTRACTOR SHALL CHECK ALL TRAFFIC MAINTENANCE AND CONTROL DEVICES AND WORK ZONES BEFORE, DURING, AND AFTER EACH WORK DAY TO ENSURE PROPER OPERATION. ON WEEKENDS, HOLIDAYS, OR ANY NON—WORKING DAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE TRAFFIC MAINTENANCE AND CONTROL DEVICES DAILY FOR PROPER OPERATION.
- 6) TWO-WAY TRAFFIC WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION UNLESS TRAFFIC ENGINEERING HAS APPROVED ANOTHER ALTERNATIVE FOR TRAFFIC CONTROL, SUCH AS A LANE CLOSURE OR A TEMPORARY STREET CLOSURE. RESIDENT AND EMERGENCY ACCESS WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION REGARDLESS IF A STREET CLOSURE IS IN EFFECT OR NOT.
- 7) IF THERE IS AN APPROVAL FROM TRANSPORTATION DEPARTMENT FOR A LANE CLOSURE OR A TEMPORARY STREET CLOSURE, ALL LANES OF TRAFFIC WILL BE REOPENED TO TRAFFIC AT THE CONCLUSION OF EACH CONSTRUCTION DAY, <u>UNLESS</u> A 24-HOUR TEMPORARY STREET CLOSURE IS APPROVED AND IN EFFECT.
- 8) IN ALL CASES IN WHICH EXISTING OR ESTABLISHED TRAFFIC PATTERNS WILL BE DISRUPTED, THE CONTRACTOR WILL NOTIFY <u>ALL</u> AFFECTED RESIDENTS AND/OR BUSINESSES A MINIMUM OF 48 HOURS IN ADVANCE OF THE ANTICIPATED DISRUPTION BY DISTRIBUTING DOOR—TO—DOOR NOTICES. A COPY OF THE NOTICE SHALL BE FORWARDED TO TRANSPORTATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO BEGINNING WORK.
- 9) AT NIGHT OR DURING NON-CONSTRUCTION HOURS, ALL EXCAVATED AREAS ARE TO BE BACKFILLED OR SECURED AND PROTECTED BY USING APPROVED SAFETY DEVICES OR MATERIALS.
- 10) WHEN THE USE OF TYPE III BARRICADES IS REQUIRED (DAY OR NIGHT), ALL BARRICADES WILL BE EQUIPPED WITH TYPE A HIGH-INTENSITY FLASHING WARNING LIGHTS.
- 11) IN ACCORDANCE WITH THE VIRGINIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS (CONSTRUCTION INDUSTRIAL) 29 CFR, PART 1929, 1989 EDITION, ALL CONTRACTOR EMPLOYEES AND SUBCONTRACTOR(S) EMPLOYEES EXPOSED TO VEHICULAR TRAFFIC WILL BE PROVIDED WITH AND REQUIRED TO WEAR WARNING VESTS MARKED WITH OR MADE OF REFLECTORIZED OR HIGH VISIBILITY MATERIALS.
- 12) FOR CONSTRUCTION OPERATIONS LASTING MORE THAN 14 DAYS, THE CONTRACTOR WILL INSTALL A ROAD WORK AHEAD @ (W21-4) AND A END ROAD WORK @ (G20-2A) WARNING SINGS ON 6" X 6" WOODEN GROUND MOUNTED POSTS. THESE SIGNS MUST BE INSTALLED PRIOR TO BEGINNING CONSTRUCTION WORK AND WILL BE REMOVED AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITIES.
- 13) FOR ALL APPROVED CONSTRUCTION/TRUCK ENTRANCES, THE CONTRACTOR WILL INSTALL "TRUCKS ENTERING HIGHWAY" (48" X 48" ORANGE AND BLACK) WARNING SIGNS ON 6" X 6" WOODEN GROUND MOUNTED POSTS. THESE SIGNS WILL BE INSTALLED 500 FEET IN ADVANCE OF ALL APPROVED CONSTRUCTION ACCESS/ENTRANCE POINTS.
- 14) ANY TRAFFIC CONTROL DEVICES INCLUDING BUT NOT LIMITED TO PAVEMENT MARKINGS, SIGNS, AND TRAFFIC CONTROL SIGNAL EQUIPMENT DAMAGED OR DESTROYED BY THE CONTRACTOR MUST BE REPLACED AT THE CONTRACTOR'S EXPENSE UNLESS THEIR REMOVAL OR DESTRUCTION IS CALLED FOR BY THE PLANS.
- 15) FOR ANY FURTHER INFORMATION ON TRAFFIC MAINTENANCE AND CONTROL REQUIREMENTS, PLEASE CONTACT THE TRANSPORTATION DEPARTMENT (757) 664-7300 FAX: (757) 664-7311.
- 16) PROVIDE FLAGGERS DURING TEMPORARY CLOSURE OF THROUGH LANE WHILE TRUCKS ARE ENTERING AND PROJECT ACCESS.
- 17) CONTRACTOR SHALL OBTAIN ALL APPLICABLE HAULING/RIGHT-OF-WAY PERMITS PRIOR TO CONSTRUCTION.

# TEMPORARY TRAFFIC CONTROL LEGEND:

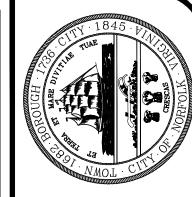
- M4-9R, DETOUR RIGHT
- 7 R3-2, NO LEFT TURN
- 2 M4-9L, DETOUR LEFT
- 8 G20-2, END ROAD WORK
- 3 W20-2, DETOUR AHEAD
- 9 M4-8A, END DETOUR

  10 TYPE 3 BARRICADE
- 5 W20-1, ROAD WORK AHEAD

W20-3, ROAD CLOSED AHEAD

- 11 R11-4, ROAD CLOSED TO THRU TRAFFIC
- 6 R3-1, NO RIGHT TURN







ng + engineering + environme E CIR - VA BEACH, VIRGINIA 23455 26.0081 - F757.226.8765

770 INDEPENDENCE CIR - VA BEAC P757.226.0081 - F757.22 www.blakewaycorp.or

ICE OF TRAFFIC P

MAINTENANCE OI

REV # PROJECT REVISIONS DATE

PROJECT REVISIONS DATE

5/24/16

DESIGNED BY: E. TOLLI
PREPARED BY: E. TOLLI
ISSUE DATE:

2/22/16

SHEET **CT-8.0** 

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Dig With @ A R D





PREPARED BY: E. TOLL ISSUE DATE: 2/22/16

SHEET

CT-8.

Page 6H-44

**Typical Traffic Control** 

Lane Closure Operation with Lane Weave (Figure TTC-19.1) **NOTES** 

1. On divided highways having a median wider than 8', right and left sign assemblies shall be

- 2. Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.
- 3. Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. For Limited Access highways a minimum of 1000' is desired. 4. All vehicles, equipment, workers, and their activities should be restricted to one side of the payement.

#### 5. Taper length (L) and channelizing device spacing shall be:

7	aper Le	ength (L	.)		
Speed Limit					
(mph)	9	10	111	12	
25	95	105	115	125	
30	135	150	165	180	
.,	185	205	225	245	
40	240	270	295	320	
45	405	450	495	540	
50	450	500	550	600	
55	495	550	605	660	
60	540	600	660	720	
65	585	650	715	780	
70	630	700	770	840	
Minimum tape highwa	er length ays shall	45 ATT / 1	** *********	cess	
Shoulde	r Taper	= 1/3 L N	linimum		

On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.

Channelizing Device Spacing

Transition Spacing 20' 40'

Travelway Spacing 40' 80'

Construction Access* 80' 120'

* Spacing may be increased to this distance,

but shall not exceed one access per 1/4 mile.

Location

Speed Limit (mph)

0 - 35 36 +

Page 6H-45

April 2015

6. An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used lane.

7. The buffer space length shall be shown in Table 6H-3 on Page 6H-5 for the posted speed limit. 8. A shadow vehicle with either a Type B or C arrow board operating in the caution mode, or at least one high intensity amber rotating, flashing, or oscillating light shall be parked 80'-120' in advance of the first work crew. When the posted speed limit is 45 mph or greater, a truck-

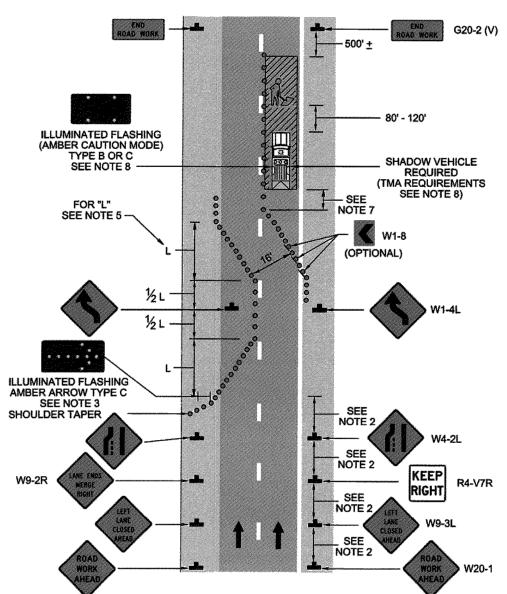
9. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or oscillating lights.

10. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

1: Revision 1 - 4/1/2015

April 2015

Lane Closure Operation with Lane Weave (Figure TTC-19.1)



Page 6H-90

April 2015 Typical Traffic Control

Interior Lane Closure Operation on a Multi-Lane Roadway (Figure TTC-42.1) NOTES

1. Sign spacing distance should be 1300'-1500' for Limited Access highways, and on all other roadways 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.

2. Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. For Limited Access highways a minimum of 1000' is desired.

3. On divided highways having a median wider than 8', right and left sign assemblies shall be

4. Taper Length (L) and Channelizing Device Spacing shall be:

	Taper L		<del></del>	41		
Speed Limit (mph)	9	Lane Width (Feet				
25	95	105	115	125		
30	135	150	165	180		
35	185	205	225	245		
40	240	270	295	320		
45	405	450	495	540		
50	450	500	550	600		
55	495	550	605	660		
60	540	600	660	720		
65	585	650	715	780		
70	630	700	770	840		
Minimun Access H						
Should	er Taper	= 1/3 L N	/linimum			

Channelizing Device Spacing Posted Speed (mph 0 - 35 36 + Transition Spacing 20' 40' Travelway Spacing 40' Construction Access* Spacing may be increased to this distance, but shall not exceed one access per 1/4 mile. On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance

of the merging taper to direct vehicular traffic to remain within the traveled way.

5. The buffer space length shall be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit.

6. A shadow vehicle with either a Type B or C arrow board operating in the caution mode, or at least one high intensity amber rotating, oscillating, or flashing light shall be parked 80'-120' in advance of the first work crew. When the posted speed limit is 45 mph or greater, a truckmounted attenuator shall be used.

7. For long-term work zones existing conflicting pavement markings and markers shall be removed and temporary pavement markings and markers shall be installed per Figure TTC-60.

8. For short-term stationary work (less than 3 days duration), lanes may be delineated by channelizing devices or removable pavement markings instead of temporary pavement markings.

9. When channelizing devices have the potential of leading vehicular traffic out of the intended traffic space, the channelizing devices should be extended a distance with 4 additional channelizing devices beyond the downstream end of the transition area as depicted. 10. For locations with a high volume of left turning movements, the graphic NO LEFT TURN (R3-2) signs

(Figure TTC-42.1)

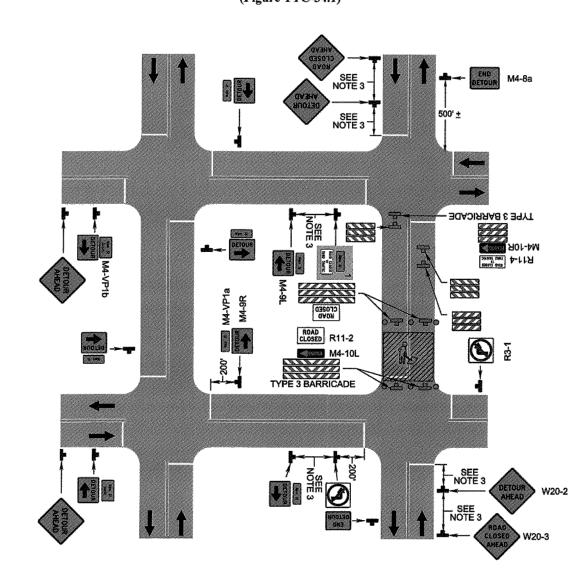
should be used.1

1: Revision 1 - 4/1/2015

Page 6H-91

April 2015

Street Closure Operation with Detour (Figure TTC-34.1)



1: Revision 1-4/1/2015

Page 6H-74

April 2015

Page 6H-75

**Typical Traffic Control** Street Closure Operation with Detour (Figure TTC-34.1) **NOTES** 

1. This plan should be used for streets without posted route numbers.

2. On multi-lane streets, Detour signs with an Advance Turn Arrow should be used in advance of a turn. 3. Sign spacing distance should be 225'-275' where the posted speed limit is 30 to 35 mph, and 100'-200'

where the posted speed is 25 mph or less.

4. If the road is opened for a significant distance beyond the intersection and/or there are significant origin/destination points beyond the intersection, the ROAD CLOSED (R11-2) and Detour Arrow (M4-10) signs on Type 3 Barricades should be located at the corners of intersecting closed roadway or the traveled way.

5. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

6. Flashing warning lights may be used on Type 3 Barricades.

7. Detour signs may be located on the far side of intersections. A Detour sign with an advance arrow may be used in advance of a turn.

8. A Street Name (M4-VP1a) plaque may be mounted with the Detour sign. The Street Name plaque may be either white on green or black on orange.

9. When used, the Street Name plaque shall be placed above the Detour sign.

10. See Chapter 6I for additional information on incident management traffic control.

LLANEOUS NOTES ND DETAILS

MISCEI

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLI

ISSUE DATE: 2/22/16 SHEET

January 2015

Interior Lane Closure Operation on a Multi-Lane Roadway

SEE BOTTOM FOR TTC DEVICES AND TTC DEVICES AND THOUS SEE NOTE 9 1 4 CHANNELIZING DEVICES SEE NOTE 9

1: Revision 1 - 4/1/2015

Shoulder Operation with Minor Encroachment (Figure TTC-5.1) **NOTES** 

- 1. For required sign assemblies for multi-lane roadways see Note 1, TTC-4.1 Guidance
- 2. Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.
- 3. When work takes up part of a lane on a high volume roadway; vehicular traffic volumes, vehicle mix, speed and capacity should be analyzed to determine whether the affected lane should be closed. Unless the lane encroachment analysis permits a remaining lane width of 10 feet, the lane should be closed. If the closure operation is on a Limited Access highway, the minimum lane width is 11 feet.
- 4. The ROAD WORK AHEAD (W20-1) sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.
- 5. A shadow vehicle with either an arrow board operating in the caution mode, or at least one highintensity amber rotating, flashing, or oscillating light shall be parked 80' - 120' in advance of the
- first work crew. 6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or oscillating lights.
- 7. Taper length (L) and channelizing device spacing shall be at the following:

Taper Length (L)					
Speed Limit	L	ane Wid	dth (Feet)		
(mph)	9	10	11	12	
25	95	105	115	125	
30	135	150	165	180	
35	185	205	225	245	
40	240	270	295	320	
45	405	450	495	540	
50	450	500	550	600	
55	495	550	605	660	
60	540	600	660	720	
65	585	650	715	780	
70	630	700	770	840	
Minimum tape highwa	er length ys shall			cess	
Shoulde	Shoulder Taper = ⅓ L Minimum				

Channelizing Device Spacing					
Laatian	Speed Limit (mph)				
Location	0 - 35	36 +			
Transition Spacing	20'	40'			
Travelway Spacing	40'	80'			
Construction Access*	80'	120'			
* Spacing may be increased to this distance, but shall not exceed one access per ½ mile.					
In roadways with pave ridth of 8 feet or more hall be used to clo dvance of the merg ehicular traffic to rema	, channelizi ose the s ging taper	ing device houlder in to direc			

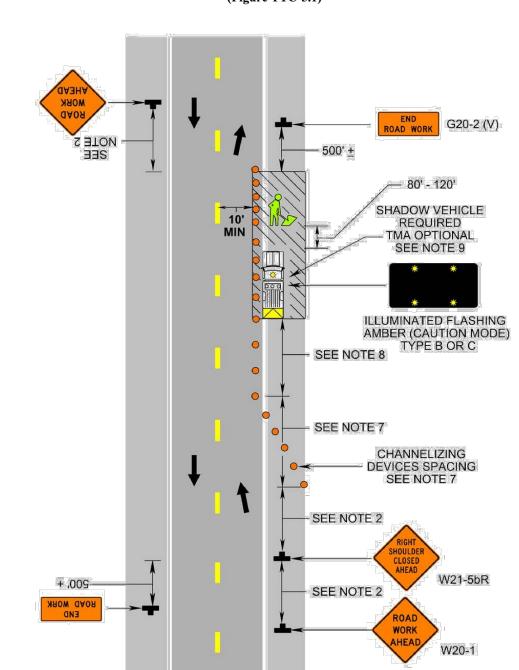
- 8. The buffer space length shall be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit. 9. A truck-mounted attenuator (TMA) shall be used on Limited Access highways and multi-lane roadways with posted speed limit equal to or greater than 45 mph.
- 10. When a side road intersects the highway within the temporary traffic control zone, additional traffic control devices shall be placed as needed.

1: Revision 1 - 4/1/2015

April 2015

Page 6H-17

**Shoulder Operation with Minor Encroachment** (Figure TTC-5.1)



August 2011 Page 6H-76

> **Typical Traffic Control** Sidewalk Closure and Bypass Sidewalk Operation (Figure TTC-35.0) **NOTES**

1. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.

- 2. Where high speeds are anticipated, a temporary traffic barrier and, if necessary, a crash cushion should
- be used to separate the temporary sidewalks from vehicular traffic. 3. Audible information devices should be considered where midblock closings and changed crosswalk
- areas cause inadequate communication to be provided to pedestrians who have visual disabilities. 4. Temporary markings should be considered for operations exceeding three days in duration.
- 5. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS (W5-1) signs, may be used to control vehicular traffic.
- 7. Signs, such as KEEP RIGHT (R4-V7R) and KEEP LEFT (R4-V7L), may be placed along a temporary sidewalk to guide or direct pedestrians.

**Sidewalk Closure and Bypass Sidewalk Operation** 

(Figure TTC-35.0)

R9-118R (CROSS HERE SIDEWARK CLOSED

SIDEWALK CLOSED R9-11aL

TYPE 3 BARRICADE

SIDEWALK DETOUR

KEEP KEEP

R4-V7L

LEFT

SEE NOTES 6 & 7

SIDEWALK DIVERSION

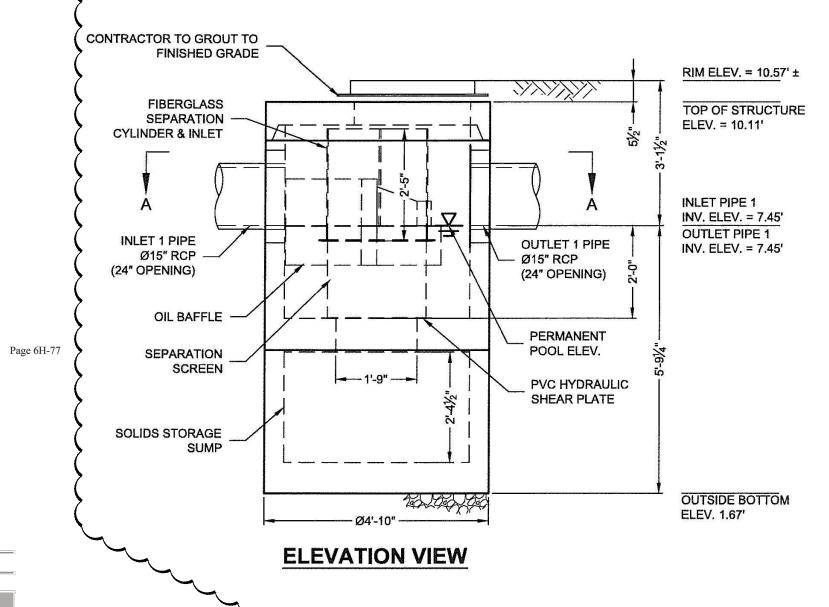
6. For nighttime closures, Type A Flashing warning lights may be used on barricades that support signs

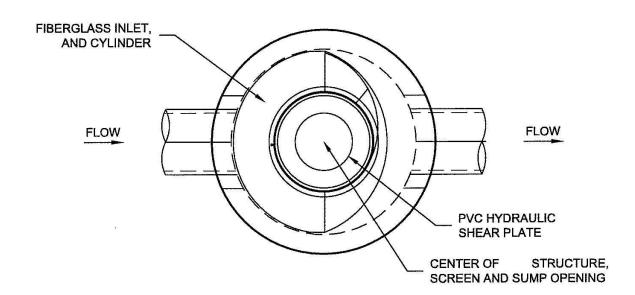
Standard: 8. All sidewalk closures shall be closed with Type 3 Barricades.

August 2011

— Ø4'-10" O.D. /-- Ø4' I.D. Ø30" x 4" FRAME AND COVER INLET

#### **PLAN VIEW**





#### **SECTION A-A**

COUNT	DESCRIPTION	INSTALLED BY
1	FIBERGLASS INLET AND CYLINDER	MANUFACTURER
1	2400 micron, 2' O.D. x 1.67' SEP. SCREEN	MANUFACTURER
1	3/16 INCH PVC HYDRAULIC SHEAR PLATE	MANUFACTURER
1	SEALANT FOR JOINTS (BY PRECASTER)	CONTRACTOR
1	Ø30" x 4" FRAME & COVER, EJ#41600484, OR EQUIV.	CONTRACTOR

WATER QUALITY FLOW RATE	0.31 CFS
PEAK FLOW RATE	1.37 CFS
RETURN PERIOD OF PEAK FLOW	10 YRS

1. MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.

2. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, REFER TO THE MANUFACTURER.

3. THE WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS

DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT. 4. STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT. OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS

SHALL MEET AASHTO M306 5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER.

REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING. 6. THE STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES

A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.

B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE MANHOLE STRUCTURE.

C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.

D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.

E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

APPROXIMATE HEAVIEST PICK = 6500 LBS. STRUCTURE IS DELIVERED IN 3 PIECES

MAX FOOTPRINT = Ø4'-10"

# HYDRODYNAMIC SEPARATOR DETAIL

NOT TO SCALE

LLANEOUS NOTES ND DETAILS MISCEI Al

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE

SHEET

ISSUE DATE: 2/22/16

∪1-ð.,

BOTANICAL NAME

QUERCUS MICHAUXII

KINGDOM HARVEST TERNATIONAL MINISTRIES INC. (INSTR. 100001072)

(M.B. 6, PG. 98)(CHES!) GPIN: 1438763767

(SWAMP CHESTNUT OAKS) 2" - 2-1/2" CAL. (8'-10' HT.)

COMMON NAME

(D.B. 1844, PG. 707)

LOTS 5-8 & PT. LOTS 1-4, BLK. 8

(M.B. 6, PG. 98)(CHES.)

GPIN: 1438764505

MINIMUM SIZE

(INSTR. 090029814) PT. LOTS 5 & 6, BLK. 5 (M.B. 6, PG. 98)(CHES.)

_{VC} (M.B. 6, PG. 98)(CHES.)

LAGERSTROEMIA INDICA (MUSKOGEE CRAPE MYRTLE) 2" - 2-1/2" CAL. (8'-10' HT.)

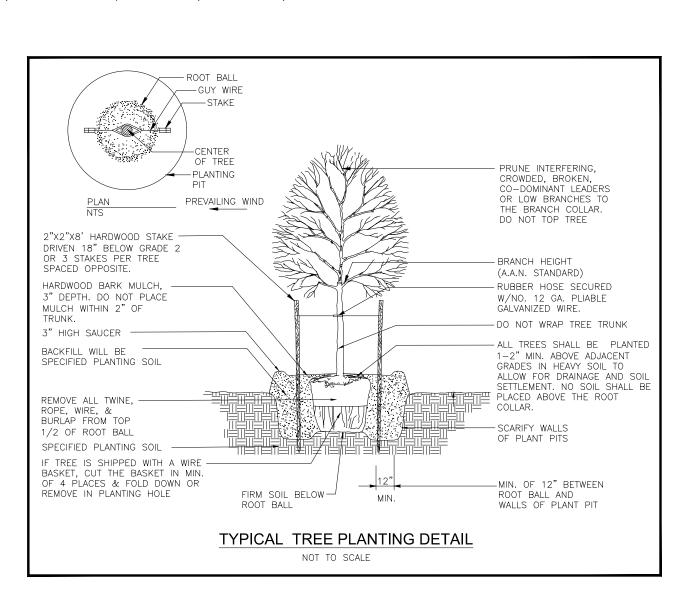
#### CITY OF NORFOLK LANDSCAPE NOTES

- 1. All required trees shall be a minimum of 2 1/2 inches in caliper and eight feet in overall height at the time of installation and of varieties, which shall attain mature spreads of at least 20 feet.
- 2. All landscaping materials shall meet the minimum specifications and standards described in the most current edition of "American Standard for Nursery Stock," 1986, published by the American Association of Nurserymen, 1250 I Street, N.W.: Suite 500, Washington, D.C. 20005.
- 3. Planting season restrictions:
- All balled and burlapped plants shall be installed between October 15 and March 31, unless otherwise authorized by the Department of Neighborhood and Leisure Services.
- All container grown plants shall be installed between September 15 and May 15, unless otherwise authorized by the Department of Neighborhood and Leisure Services. Any planting dates other than those noted above shall be considered out-
- of installation of all landscaping shall be required in conformance with provisions set forth in section 17-11. 4. SOIL NOTE: All soil in interior landscape islands shall be replaced with a minimum of 24" of topsoil. The source of the replacement soil shall be

of-season. At such times, a bond or other form of surety covering the cost

- submitted to the Bureau of Parks and Forestry for approval. Do not remove and replace soil in the vicinity of existing trees to be retained. 5. Contractor is required to obtain a Tree Permit from Parks and Urban Forestry for any tree removal or trimming on trees on City of Norfolk
- 6. Tree removal or trimming must be done by a certified Arborist.

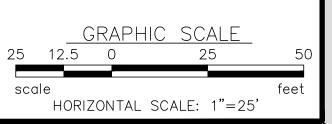
property or within the Right-of-Way.

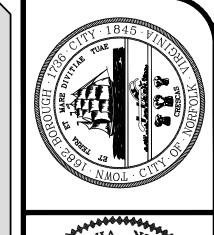


(INSTR. 120001674) PT. LOTS 7 & 8, BLK. 5 (M.B. 6, PG. 98)(CHES.) GPIN: 1438765713

#2001 LOT 7









FOR CONTINUATION

50,

STATION

JESSIE E. JOHNSON (INSTR. 070006379) LOT 6 & 7, BLK. 10 (M.B.) 6, PG. 98)(CHES.) GRIN: 1438769411

N/F MICHAEL C. EZEIGBO (INSTR. 060028364) LOT 5-7, BLK. 3 (M.B. 6, PG. 98)(CHES.) GPIN: 1438769612

LAFAYETTE BOULEVARD

NAF RUBY CORPORATION (INSTR. 090016918) LOT 4 & 5, BLK. 10( (M.B. 6, PG. 98)(CHES.) GPIN: 1438768433

N/F FERRO BUILDING COMPANY

(INSTR. 140019925) LOT 3 & 4, BLK. 3

RONALD L. LOCKAMY & TRACY R. LOCKAMY (INSTR. 030030294)
LOT 1 & 2, BLK. 3

HARVEY E. JONES RUBY CORPORATION (D.B. 1455, PG. 276) (INSTR. 090016920)
LOT 1 & 2, BLK. 10 LOT 3, BLK. 10
(M.B. 6, PG. 98)(CHES.) (M.B. 6, PG. 98)(CHES.)
GPIN: 1438767495 GPIN: 1438768414

N/F KLH REAL ESTATE TRUST #8

(INSTR. 140024801) LOT 4, BLK. 4

(M.B. 6, PG. 98)(CHES.) | GPIN: 1438766659

LOT 4

#2106

N/F NICHOLSON PROPERTIES, LLC (INSTR. 120025153) LOT 4, 5 & PT. LOT 3, BLK. 9

N/F ROBERT L. NICHOLSON (INSTR. 140019371) PT. (LOT 3, BLK. 9 (M.B. 6, PG. 98)(CHES.) GPIN: 1438765572

NINÁ NOVA

ST. COLUMBA ECUMENICAL MINISTRIES

(D.B. 2321, PG. 185) LOT 7 & 8, BLK. 4 (M.B. 6, PG. 98)(CHES.) GPIN: 1438767627

(INSTR. 050050314) LOT 8, BLK. 9 (M.B. 6, PG. 98)(CHES.) GPIN: 1438766497

ROSALIND J. GLOVER (INSTR. 060006933) LOT 6 & 7, BLK. 9

DELLAVISISA X. MATTHEWS
(INSTR. 010017558)
LOT 1, BLK. 4

JAMES ARIAS JR. (INSTR. 030032892) LOT 1 & 2, BLK. 9 (M.B. 6, PG. 98)(CHES.)

DELLAVISISA X. MATTHEWS

(INSTR. 010017558)

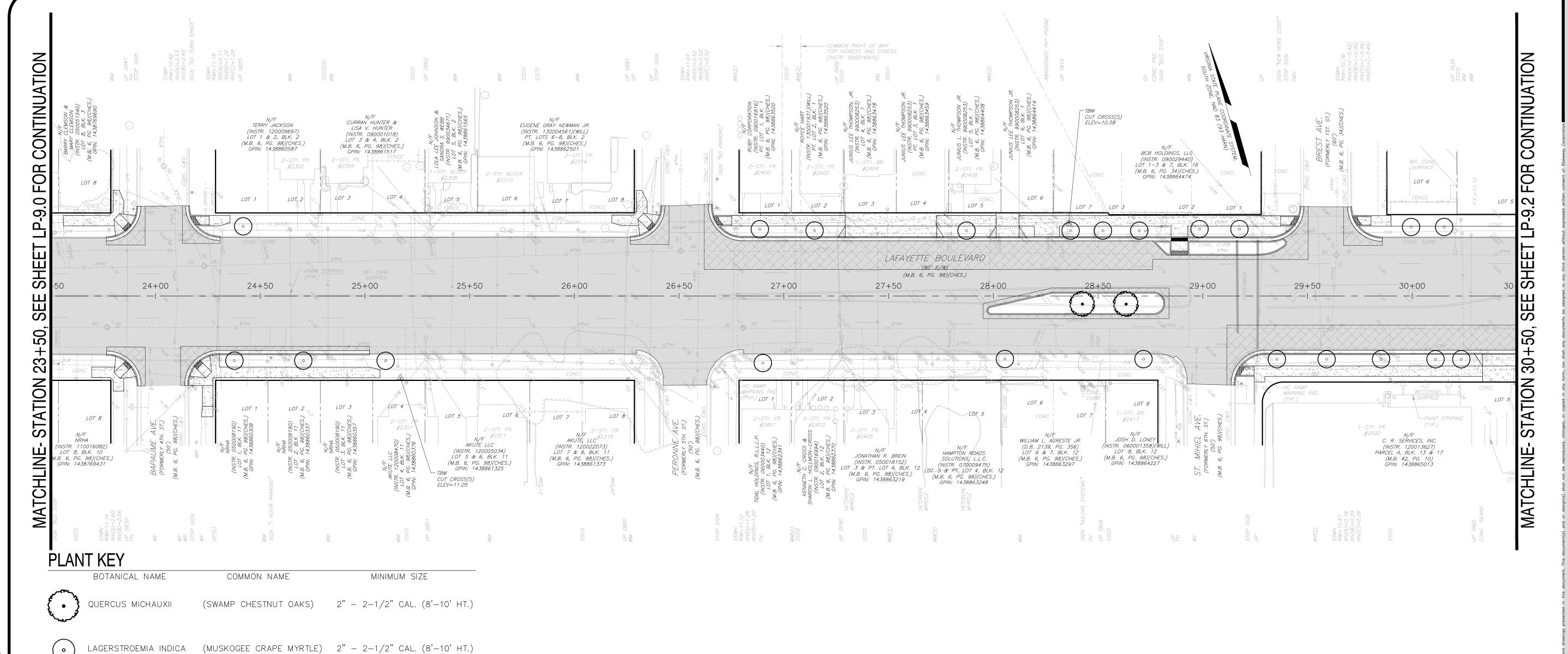
LOT 1, BLK. 4

(M.B. 6, PG. 98)(CHES.)

GPIN: 1438766700

DESIGNED BY: E. TOLLE

PREPARED BY: E. TOLLE **ISSUE DATE:** 2/22/16



CITY OF NORFOLK

DEPARTMENT OF PUBLIC WORKS

LANDSCAPE PLAN

TAO INDEPENDENCE CIR - VA BEACH
NORFOLK, VIRGINIA

SCITY OF NORFOLK

BLANKE

LAFAYETTE BOULEVARD

www.blakewaycorp.com

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE

2/22/16

SHEET

ISSUE DATE:

Value Company Company

GRAPHIC SCALE

25 12.5 0 25 5

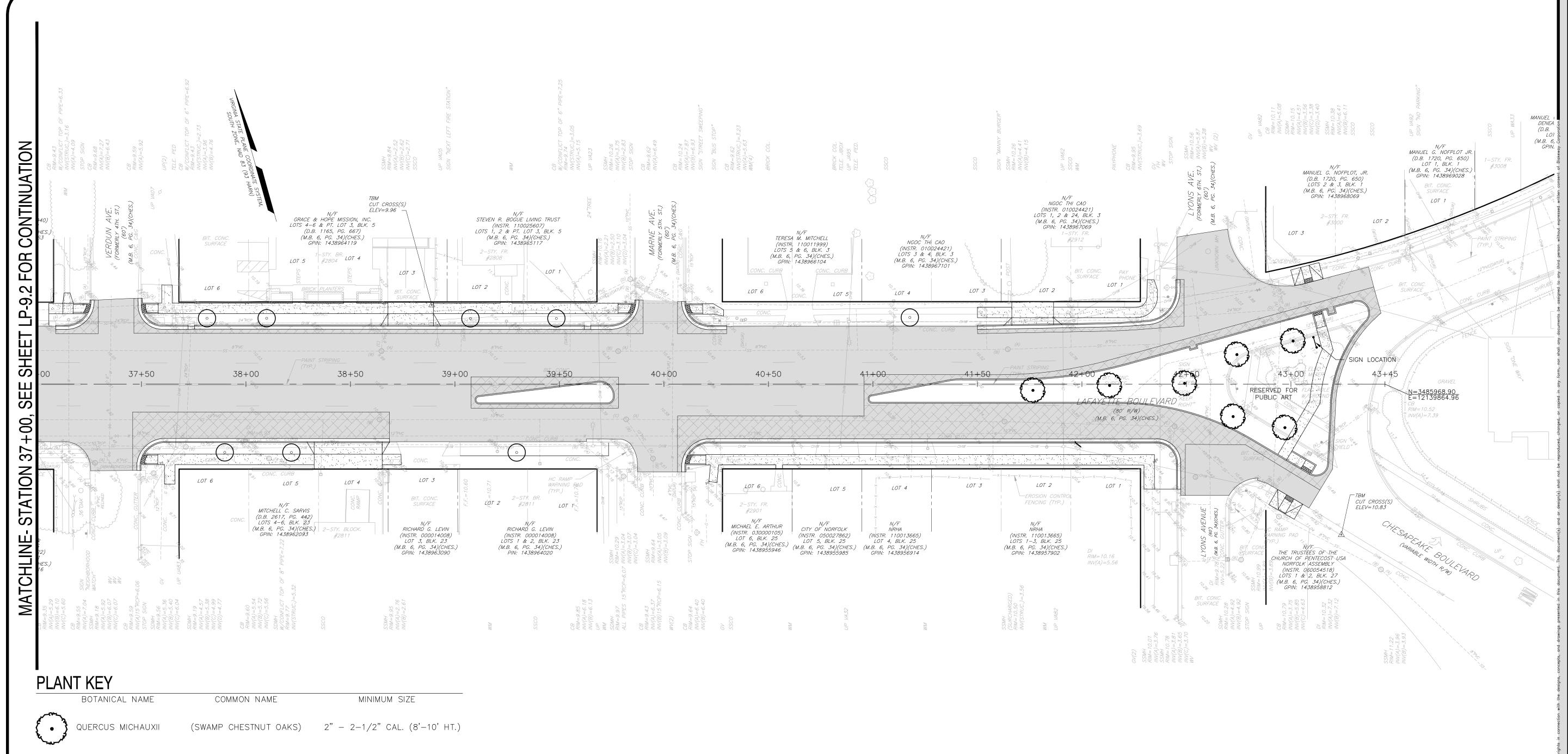
scale feet
HORIZONTAL SCALE: 1"=25"

FILE NAME: C:\Users\elmert\appdata\local\temp\AcPublish_7716\34—LP—9.1 Landscape.dwg LAYOUT NAME: Layout1 PLOTTE

DESIGNED BY: E. TOLLE PREPARED BY: E. TOLLE ISSUE DATE:

2/22/16 SHEET

HORIZONTAL SCALE: 1"=25'



LAGERSTROEMIA INDICA (MUSKOGEE CRAPE MYRTLE) 2" - 2-1/2" CAL. (8'-10' HT.)

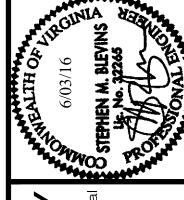


GRAPHIC SCALE

25 12.5 0 25 50

scale feet
HORIZONTAL SCALE: 1"=25'

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+ environmental Continua + environmental Conti

surveying + engineering + environm
EPENDENCE CIR - VA BEACH, VIRGINIA 2345
P757.226.0081 - F757.226.8765

Surveying + eng

LANDSCAPE PLAN
LAFAYETTE BOULEVARD
NORFOLK, VIRGINIA

1SIONS DATE 5/24/16

REVISED PER CITY COMMENTS DATED 3/3/16

DESIGNED BY: E. TOLLE
PREPARED BY: E. TOLLE
ISSUE DATE:
2/22/16

SHEET

LP-9